Department of Psychology, University of Cape Town

Parental Engagement in Parent Training Interventions: Findings from the Sinovuyo Caring Families Project

Inge Marie Wessels

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ABSTRACT

Background: Poor parental engagement in parent training programmes is problematic as it wastes resources, affects prevention research, and prevent parents from engaging in programming that may benefit them. Understanding predictors of engagement, and how it relates to programme outcomes, is central to developing efficient interventions. There has been very little research into these relationships in low- and middle-income countries, like South Africa, and so this study sought to investigate them in the Sinovuyo Caring Families Programme (SCFP) when it was evaluated via randomised controlled trial (N = 296 parent-child dyads) in South Africa.

Methods: Mixed-effects logistic regression models were used to explore baseline predictors of enrolment, attendance, and level of home practice completion among intervention group participants. Additionally, qualitative data on the barriers and facilitators of engagement was collected via semi-structured interviews with 32 of these participants. This data was analysed thematically. Finally, generalised linear mixed methods were used to investigate whether there was an association between attendance and programme outcomes.

Results: Lower levels of parenting stress, greater use of physical punishment and lower use of emotional punishment significantly predicted the odds of enrolling. There were no significant predictors of attendance, while there was an effect of facilitation pair on the extent of home practice completion. According to qualitative findings, structural, programmatic, and personal factors all affected engagement in the SCFP. Commonly mentioned barriers included alcohol abuse, financial constraints, and a lack of readiness to change. Facilitators of engagement included a greater sense of motivation and family buy-in.

Conclusion: Since higher attendance was associated with greater programme benefits, more effort is needed to support enrolment and retention. Parent training interventions should consider parents' readiness for change. Motivational interviewing approaches at the start may

help to increase engagement. Programme implementers should also minimise financial barriers to access, such as by providing transport money before the first session or situating programme venues close to participants' homes. Programmes cannot be viewed in isolation of other community problems, such as alcohol abuse, that may affect participants.

Keywords: engagement, parent training, enrolment, attendance, home practice

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Chapter 1: Introduction

Parenting is one of the most difficult tasks for which adults are responsible. However, for most parents in low- or middle-income countries like South Africa, the typical challenges of being a parent are compounded by a range of risk factors – perhaps the most considerable of these being poverty. In 2011, almost half of the population (or 23 million people) in South Africa were classified as poor (Statistics South Africa, 2014). A large proportion of those affected were children, with 35.7% (6.6 million) of them not reaching the recommended daily caloric intake (Hall & Sambu, 2016). Data from high-income countries suggests that poverty has many adverse effects on parenting. For example, low socio-economic status (SES) has been shown to predict the use of parental corporal punishment (e.g., Gershoff, 2002; Straus & Stewart, 1999) – perhaps due to elevated levels of parental stress (Straus, 1994). Although there is no clear data on this relationship from South Africa, the available data finds high rates of corporal punishment, with 57% of a sample of 925 South African parents reporting that they smacked their children, and 33% saying that they used severe corporal punishment (Dawes, De Sas Kropiwnicki, Kafaar, & Richter, 2005). Whether this is simply a normative approach to childrearing within South Africa's several cultural traditions, or whether it is aggravated by the stress of poverty, is not known. However, another study in the country, which used a large community-based sample, found prevalence rates, based on child report, to be 56% for lifetime physical abuse and 36% for lifetime emotional abuse, with primary caregivers being identified as the main perpetrators (Meinck, Cluver, Boyes, & Loening-Voysey, 2016). These rates are higher than what has been reported in studies from Western countries, including Canada (MacMillan, Tanaka, Duku, Vaillancourt, & Boyle, 2013), the United Kingdom (e.g., May-Chahal & Cawson, 2005), and Portugal (e.g., Machado, Gonçalves, Matos, & Dias, 2007).

Again, research from high-income countries demonstrates that mothers living in poverty tend to show less maternal warmth (Klebanov, Brooks-Gunn, & Duncan, 1994). They are also more likely to suffer from depression, which increases their likelihood of being less consistent in their parenting and providing inadequate monitoring and supervision of their children (Elder, Eccles, Ardelt, & Lord, 1995; Lovejoy, Graczyk, O'Hare, & Neuman, 2000). A study in a low-income community in South Africa found a high prevalence of prenatal depression, with 37% of 1145 pregnant women screening positive for depressed mood (Tomlinson et al., 2014). This rate is much higher than the 7% to 13% found in high-income countries (Bennett, Einarson, Taddio, Koren, & Einarson, 2004).

The challenges of parenting in the context of poverty tend to be more severe when low-income parents do not have the support of a partner or social network (Hashima & Amato, 1994). In South Africa, this point is concerning as most households in the country are run by single parents – in 2013, 65% of children lived with only one of their biological parents (Statistics South Africa, 2014). This figure is a stark contrast to the United States of America (USA), where, in 2015, 65% of children lived with two married parents (Child Trends Databank, 2015).

The points raised above are concerning since parenting that is inconsistent, lacks warmth and adequate supervision, and includes corporal punishment can lead to many negative outcomes, including child emotional and behavioural problems (Durrant & Ensom, 2012; Gershoff, 2002; Scott, 2008). Furthermore, child maltreatment, the most severe form of poor parenting, and which is a serious problem in South Africa (Artz et al., 2016; Meinck et al., 2016), can damage the developing brain and increase the risk for impaired cognition by over-stimulating the body's stress response system (Anda et al., 2006). In the longer term, victims of maltreatment have an increased likelihood of abusing substances (Norman et al., 2012), engaging in risky sex (Butchart, Harvey, Mian, & Furniss, 2006), having poor mental

health outcomes in adulthood (Silverman, Reinherz, & Giaconia, 1996), and becoming involved in violence either as a victim or perpetrator (Dunkle et al., 2004; Fang & Corso, 2007). On the other hand, parenting that is warm, responsive and consistent plays a critical role in healthy child development (Gardner, Sonuga-Barke, & Sayal, 1999), and can protect against the effects of broader family and community factors (Knerr, Gardner, & Cluver, 2013).

Developing parents' capacity to form positive and non-violent relationships with their children is, therefore, central to promoting healthy child development and preventing adverse child outcomes, including child maltreatment (Barlow, Johnston, Kendrick, Polnay, & Stewart-Brown, 2006); thus increasing the likelihood that children will develop into well-adjusted and economically productive adults. This is particularly important in contexts of poverty where children who receive poor parenting will be at greater risk of remaining poor in adulthood through conduct problems that contribute to poor school outcomes that mean low job attainment as well as a higher risk of being imprisoned (Ward, Makusha, & Bray, 2015). Also, conduct problems have been shown to elicit poor parenting as parents are coerced to discontinue using appropriate discipline strategies (Burke, Parding, & Loeber, 2008). Considering this, implementing evidence-based interventions that support parents is critical to national development in South Africa, a country deeply affected by poverty and violence (Gould & Ward, 2015). One such intervention is parent training programmes that take a behavioural approach and are based on social learning models (Dishion & McMahon, 1998).

Parent training programmes involve parents actively acquiring new skills to strengthen their relationship with their children as well as manage problem behaviours without using physical punishment (Kaminski, Valle, Filene, & Boyle, 2008). A solid body of evidence shows that they can improve parenting (e.g., Nowak & Heinrichs, 2008; Thomas & Zimmer-

Gembeck, 2007), reduce child behaviour problems (e.g., Dretzke et al., 2009; Furlong et al., 2012; Serketich & Dumas, 1996), and lower the risk for maltreatment (e.g., Barlow et al., 2006; Lundahl, Nimer, & Parsons, 2006). The potential of these programmes has been recognised by international agencies, with the World Health Organization (WHO) identifying them as a violence prevention "best buy" (Butchart & Mikton, 2014). Despite this endorsement, most evidence-based parenting interventions have been developed and implemented in high-income countries, with a lack of such programming in low- and middle-income countries where the need for such programming is especially great (Knerr et al., 2013; Mejia, Calam, & Sanders, 2012).

Encouragingly, over recent years, there has been growing interest from international donors and governments in the wide scale implementation of parenting programmes in low- and middle-income countries. This interest is supported by a systematic review of parenting programmes in these countries, which found that, despite the shortage of rigorously evaluated and reported studies, parenting interventions are likely to be a feasible and effective approach for improving parent and child outcomes in these settings (Knerr et al., 2013). Another recent review found that evidence-based parenting programmes are likely to be transportable across countries, even to those with different cultures and contexts (F. Gardner, Montgomery, & Knerr, 2016). This finding aligns with a growing number of acceptability studies in countries other than those in which programmes were originally developed. For example, women living in shelters for the battered in Cape Town (Wessels & Ward, 2016), as well as parents in Panama City (Mejia, Calam, & Sanders, 2015a), found the strategies used by the Australian-developed Triple P-Positive Parenting Program (Triple P) to be acceptable.

Large aid organisations are playing a central role in the movement to disseminate programming in low-resource settings. For example, Save the Children

(https://www.savethechildren.net/) initiated the development of Positive Discipline in Everyday Parenting (PDEP) in response to the call outlined in the United Nations World Report on Violence Against Children (Pinheiro, 2006) to equip parents with skills to form positive and non-violent relationships with their children (Durrant et al., 2014). According to the PDEP website (http://www.positivedisciplineeveryday.com), the programme has already been implemented in 25 countries, many of which are classified as low- or middle-income countries. Other parenting programmes are increasingly being evaluated in lower income countries. For example, the American Psychological Association's ACT/Parents Raising Safe Kids programme, which is widely implemented in the USA, has just been tested in Brazil (Altafima, Pedro, & Linhares, 2016). Also, Triple P has recently been tested in Panama (Mejia, Calam, & Sanders, 2015b), China (Guo, Morawska, & Sanders, 2016), and Indonesia (Sumargi, Sofronoff, & Morawska, 2015).

In alignment with the growing parenting support "movement", the South African government is showing an increased interest in prevention and early intervention and has acknowledged the need for the wide-scale implementation of parenting programmes. They are mandated by Chapter 8 of the South African Children's Amendment Act of 2007 (Act 41 of 2007) to provide and fund interventions to support and develop positive parenting (Budlender, Proudlock, & Giese, 2011). Section 144 focuses on family preservation and developing positive relationships within families, strengthening and building capacity in parenting skills, and equipping parents with non-violent alternatives to corporal punishment. The South African Integrated Programme of Action on Violence Against Women and Children (2013–2018) also identifies parenting programmes as a key prevention and protection intervention (Western Cape Government, 2013).

Despite the interest in parenting training in South Africa, an evidence base for these interventions is lacking. In 2012, I conducted a review of the 21 group-based parent training

programmes available in the country at the time and found that none were evidence-based or widely implemented (Wessels & Ward, 2015). This absence of evaluation is concerning in the face of the apparent widespread need in South Africa for such parent support interventions, since interventions must be evidence-based before being scaled up – not only does this prevent beneficiaries from receiving programmes that may be ineffective or even harmful, but also prevents the wastage of funds that could be better spent elsewhere (Gottfredson et al., 2015; Wessels et al., 2013).

The lack of available evidence-based parent training programmes in South Africa, combined with government and international agency interest in investing and scaling up this intervention type, led to the creation of the Sinovuyo Caring Families Programme (SCFP), and a series of studies to test it in practice – collectively known as the Sinovuyo Caring Families Project. This project, which is a collaboration between colleagues at the Universities of Cape Town, Oxford, and Bangor, and the implementing non-governmental organisation (NGO), Clowns Without Borders South Africa (CWBSA; http://www.cwbsa.org/), is based in Cape Town, South Africa. The SCFP is a 12-week group-based parent training programme for isiXhosa-speaking parents of two- to nine-year-olds with challenging behaviour. There is also a version of this programme for parents of 10- to 17-year-olds, which is currently being evaluated via a cluster randomised controlled trial (RCT) in rural villages in the Eastern Cape province of the country (Cluver et al., 2016).

Due to the growing evidence on cross-cultural transportability of interventions, the research team behind the SCFP had explored the option of importing an evidence-based programme from a high-income country. However, it was unlikely to be financially feasible due to the relatively high costs of materials, training, and accreditation, as well as the need to use highly-qualified professionals as implementers (Mikton, 2012). Therefore, the team felt that it was likely to be more sustainable to develop and test a local programme that utilises

common components of effective interventions, has low-cost, open-source materials, and uses community-based workers as group leaders. Due to its focus on affordability and cultural acceptability, SCFP is one of the interventions that forms the Parenting for Lifelong Health suite of programmes (Ward et al., 2014). Parenting for Lifelong Health is a research initiative, and a collaboration between WHO, UNICEF, and the Universities of Stellenbosch, Cape Town, Bangor, Oxford, and Reading; it involves the development, testing, and large-scale dissemination of a suite of affordable and evidence-based parenting programmes for low-resource settings.

After formative work in 2012 (Lachman et al., 2016a), the SCFP was piloted via an RCT in 2013 ($N = 68$ parent-child dyads; Lachman et al., in press), and then evaluated via a larger trial (with a one-year follow-up) from 2014 to 2016 to determine the intervention's efficacy ($N = 296$ parent-child dyads; Ward et al., forthcoming). Both evaluations were designed as pragmatic trials within the typical delivery system in South Africa – i.e., the programme was delivered as a stand-alone intervention offered by an NGO. I worked as the Trial Manager during the second trial.

During the efficacy trial, the team and I identified that engagement was a definite challenge and additional resources were needed to support parents to get to programme sessions, and to engage with the material. This lower than desired level of engagement occurred despite including initial strategies to foster engagement in the SCFP, such as locating programme venues close to participants' homes, conducting pre-programme and between-session home visits, sending out weekly SMS reminders, encouraging a "buddy" system between participants, and providing transport reimbursements and meals at sessions. A lack of engagement is concerning as it not only affects trials but also has implications for the wider dissemination of interventions. This issue is especially relevant in South Africa since programmes may soon be rolled out widely, considering policymakers' interest in

them. Before scale-up efforts are initiated, it is critical to understand how best to target parents and how to recruit and retain them in programmes successfully (Spoth, Kavanagh, & Dishion, 2002). Implementing strategies to increase these processes then prevents inefficient use of scarce resources and ensures that as many parents as possible can benefit. Encouragingly, there has been local interest in understanding engagement, with the Institute for Security Studies in South Africa contracting my colleagues and me to write a policy brief on barriers and facilitators to engagement when they discovered our interest in this process within local programmes (Wessels, Lester, & Ward, 2016).

Researchers from high-income countries, and particularly the USA, have been investigating the issue of low engagement in parent training since the 1990s. Their studies have sought to identify variables that predict engagement (e.g., Dumas, Nissley-Tsiopinis, & Moreland, 2007; Gross, Julion, & Fogg, 2001; Spoth & Redmond, 1995), and understand how engagement is associated with programme outcomes (e.g., Baydar, Reid, & Webster-Stratton, 2003; Nix, Bierman, & McMahon, 2009). However, no research has investigated engagement in these programmes in low- and middle-income countries, where contexts of poverty, poor transport systems, and other factors that may provide barriers or facilitators to attendance are quite different from those of high-income countries. Because of this, I decided to investigate engagement in the SCFP further in the form of this thesis.

Since the idea for this research came some way into my work as Trial Manager, I was limited by the data that the team was already collecting on outcome and process variables. I have used the available data to develop two sets of quantitative models – the first to predict participants enrolling in the SCFP, missing sessions, and the extent to which they completed home practice tasks, and the second to explore the relationship between session attendance and participants' changes on targeted outcomes over time. To ameliorate some of the shortcomings of the quantitative data, and also collect information on participants' lived

experiences in relation to the programme, I conducted qualitative interviews with a sample of intervention group participants after the programme was delivered. Together, the quantitative and qualitative information was used to understand the engagement "pathway" – i.e., What predicts a participant enrolling and then attending the programme? Then, if they attend, what predicts that they will participate meaningfully? Finally, how then does their engagement impact their change in the intervention's targeted outcomes? This final question is key since the purpose of participating in an intervention is so that there can be positive changes in parents' and children's behaviour.

Using data from a pragmatic efficacy trial, rather than from a study tailored specifically towards engagement, meant that much of the quantitative data included in the study is the type of data that programmes might collect routinely (i.e., child age, levels of child behaviour problems). In that sense, the work is "real world" or could give some idea of the "real world" interactions that might predict engagement – for instance, programmes are unlikely to gather formal data on readiness to change (a common construct in understanding engagement in many treatment programmes (Miller & Tonigan, 1996), but would have a sense of the scale of child behaviour problems. The data used in this thesis might thus be directly useful for programme staff.

This thesis chronologically documents the process of understanding engagement in the SCFP during its evaluation. Chapter 2, which follows, presents a review of the literature on engagement within parent training interventions. Chapter 3 provides contextual background by explaining the development and piloting of the SCFP as well as the larger RCT of the programme. The research questions and design of this study are then outlined in Chapter 4. Chapter 5 presents the methods and findings of the qualitative component of this work. Then, the engagement models and dose-effect models are presented in Chapters 6 and 7, respectively. Additional process data is discussed in Chapter 8. Qualitative and

quantitative findings are then discussed in more detail, and within the context of existing literature, in Chapter 9. Implications of the study findings are also discussed in this final chapter.

Chapter 2: Literature Review – Engagement in Parent Training Interventions

South Africa is an example of a middle-income country in which the government is showing an interest in the wide-scale implementation of parenting interventions (Department of Social Development, 2012; Western Cape Government, 2013). While the evidence base for these programmes in the country has been lacking, there are now a few examples of programmes that have recently undergone high-quality evaluation and are contributing to a pool of local interventions with evidence of improving specific parent and child outcomes (Cluver et al., 2016; Jama Shai & Sikweyiya, 2015; Ward et al., forthcoming). While this focus on effectiveness is needed so that only interventions that are likely to achieve desired outcomes are taken to scale, engagement also needs to be a key consideration - ultimately, if an evidence-based programme is disseminated and no-one engages with it, positive outcomes cannot be achieved (Whittaker & Cowley, 2012).

Despite the importance of understanding engagement, there is no literature on this process within the context of parent training, or parenting interventions more broadly, in South Africa. Available research on retention in health or social services in the country tends to be concentrated in the area of HIV/AIDS medical treatment within primary care (e.g., Gardner, McLees, Steiner, del Rio, & Burman, 2011; Geng et al., 2010; Mugavero, Davila, Nevin, & Giordano, 2010). The core difference between these interventions and parent training programmes is that the former involves participants collecting medication from a clinic, while the latter involves participants receiving a behavioural programme. While getting medication is not as simple as it may superficially appear, and also extends to compliance (i.e., beneficiaries actually taking it), this process does not have the same level of complexity as shifting parenting behaviour. Although this literature may provide useful insights into some barriers to service access, these interventions are vastly different in terms of time requirements, theories of change, structure, demands on participants, implementation

and so forth. The lack of evidence on engagement in parent training in South Africa is problematic as there is no way to inform dissemination efforts so that these programmes can be as efficient as possible.

While there is a dearth of engagement literature from South Africa and other low- and middle-income countries, there is a substantial research base on this topic from high-income countries. This review will first define engagement and then synthesise available research, drawing from both the prevention and treatment literature. It will specifically present the consequences of poor engagement and identify predictors of the process.

Defining Engagement

Engagement can be defined in various ways, and studies may include only certain elements of the process in their investigation due to specific research goals or available data. Some studies, such as those conducted by Morawska, Ramadewi, and Sanders (2014) and Gross and colleagues (2001), have focused only on enrolment or attendance, or a combination of these two outcomes, as elements of engagement. Typically, enrolment refers to attending at least one session of an intervention, while attendance relates to the percentage of total sessions attended if enrolled (Baker, Arnold, & Meagher, 2011; Chacko et al., 2016). Other studies have also included quality of participation as a component of engagement (e.g., Baydar et al., 2003; Dumas et al., 2007; Nix et al., 2009). The inclusion of this additional component is important since not all parents who attend, participate meaningfully – and meaningful participation may be necessary to achieve positive outcomes (Nix et al., 2009). Participants' quality of participation is commonly measured via group leaders rating them on this construct after each session or after a series of sessions. This rating may include assessing their level of discussion during sessions, whether they arrived on time, and whether they completed their home practice exercises (Dumas et al., 2007; Nix et al., 2009). In addition to including enrolment, attendance, and quality of participation as elements of

engagement, Dumas and colleagues (2007) also included stated intent to enrol as a first step in the process.

Since multiple studies, which have included different components of engagement, are discussed in this review, the term "engagement" is used here when referring to the full engagement process – i.e., from enrolment to attendance, and quality of participation. Otherwise, for clarity, individual components, as they are discussed in studies, are presented.

Attendance, Quality of Participation, and Programme Outcomes

Numerous studies have investigated the relationship between engagement variables and programme outcomes. For example, Baydar and colleagues (2003), in their study of the impact of mental health factors and engagement in the effectiveness of the Incredible Years for mothers in Head Start in the USA, established that there was a dose-effect relationship between engagement (a variable comprised of attendance, home practice completion, and involvement in group discussions) and positive intervention outcomes. They found that mothers who had a higher level of engagement strengthened their parenting skills more than less engaged parents. Improvements were evident after just three sessions of the programme, with all mothers showing increased positive parenting with each additional session attended. Mothers who were engaged in the programme showed a significant reduction in their use of harsh, inconsistent and ineffective parenting practices as well as a significant increase in supportive and positive parenting. A different study of the same programme in Head Start classrooms found that maternal engagement in the programme was associated with children's observed pro-social behaviours and conduct problems (Reid et al. 2004), with highly engaged mothers achieving the greatest gains. These findings align with a meta-analysis of parent engagement in parent training, which found that attendance at sessions was a significant predictor of programme outcomes, although effect sizes were small (Reyno & McGrath, 2006).

Researchers have also found a relationship between attendance and quality of participation, with the former predicting the latter, with higher attenders participating more actively and enthusiastically (Dumas et al., 2007; Garvey, Julion, Fogg, Kratovil, & Gross, 2006). Following from this finding, Nix and colleagues (2009) found, in their study of a group-based parenting programme delivered within Fast Track (i.e., a multicomponent USA-based intervention to prevent antisocial behaviour), that active participation in sessions, rather than mere attendance, was predictive of improvements in parents' perceptions of their child, parental warmth, physical punishment, and school involvement. Similarly, Garvey and colleagues (2006) found that greater quality of participation, rather than attendance, was significantly related to improvements in child behaviour problems as well as reductions in parental depression scores. In the context of the New Beginnings Program, a parenting intervention for divorced parents, Berkel and colleagues (2016) found that parental efficacy and competence in completing home practice tasks predicted a number of improvements according to both parent and child reports. These improvements, which were over and above the contribution of session attendance, were seen in positive relationship quality, effective discipline, and efforts to protect children from parental conflict. These findings suggest that parents must engage with programme content, both during and between sessions, rather than simply attend sessions, if they are to achieve the greatest benefits.

Consequences of Low Engagement

Since research has shown an association between higher levels of programme engagement and better outcomes for parents and children, poor engagement is problematic and has been identified as a significant threat to evidence-based interventions by the National Institutes of Health in the USA (Olin, 2001). Parents who drop out of services, or who miss sessions, are not receiving the intended programme dose, and so may not benefit as much as those parents who attend all sessions (Prinz & Miller, 1994). Also, programme drop-outs

take places that could be used by others in need (Baker et al., 2011) – this is a particular concern in contexts, like South Africa, where services are scarce, and there are substantial numbers of families who may benefit from intervention. Group processes, which have been associated with programme effectiveness (Borden, Schultz, Herman, & Brooks, 2010), are also likely to be negatively affected by participants who attend sessions sporadically or who drop out.

Although large-scale surveys in high-income countries have indicated that parents are interested in accessing services to assist with parenting, many parents do not take up these services even when they are available to them (Patterson, Mockford, Barlow, Pyper, & Stewart-Brown, 2002; Taaffe-Young, Davis, & Schoen, 1996). Aside from getting parents in the door, programme staff also face difficulties with retaining them in the service and encouraging them to participate in a way that will likely achieve desired change (Nix et al., 2009). These difficulties are especially challenging for prevention programmes as they aim to reach parents before they have a problem with their child's behaviour, and so they may not realise that an intervention may benefit them (Baker et al., 2011; Nix et al., 2009).

A recent review by Chacko and colleagues (2016) of engagement data from 262 studies of parent training programmes found that at least 51% of individuals suitable for these interventions do not complete them. This figure was calculated using data from the 181 studies that reported on recruitment attrition, pretreatment attrition, and attrition during the programme (n = 181 studies). They also found that among programme enrolees, the average attendance rate was 73%. However, there was a large amount of variability across studies – with rates ranging between 37% and 98%. Studies that included parents from low SES backgrounds had higher attrition and lower attendance rates than studies that included parents who did have a low SES.

Poor engagement can also have an adverse impact on prevention research by reducing

the internal and external validity of interventions (Baker et al., 2011; Dumas et al., 2007). Baker and colleagues (2011) explain that reduced external validity makes it difficult to generalise findings beyond those participants who enrolled and were retained in the programme, while reduced internal validity undermines randomisation and violates the assumptions that the control group is comparable on the main variables of interest.

Difficulties in recruiting and retaining participants may also be one of the reasons why positive effects of interventions often appear to be diminished when moving from controlled efficacy trials to effectiveness trials in real world settings (Axford, Lehtonen, Kaoukji, Tobin, & Berry, 2012; Koerting et al., 2013). Axford and colleagues (2012) explain that poor enrolment and attendances rates often lead to programmes not achieving their targeted number of participants. This challenge can lead to facilitators adjusting their inclusion criteria to enable more parents to be eligible for participation (e.g., moving from only parents of young children with behaviour problems to any parents of young children). By doing this, the programme's effect may be diluted as there may not be as much change for children with behaviour in the normal range.

Since the implications of poor engagement are significant, it is necessary to explore issues of parental engagement in parent training programmes in South Africa before their wider dissemination. It is useful to understand how engagement is associated with programme outcomes as it may provide an indication of the dosage necessary to assure positive effects or explain null results (Flay et al., 2005). Also, understanding predictors of engagement, including barriers and facilitators to programme access and participation, provides insight into whether interventions are, in fact, feasible within their targeted population. It can also determine which subgroups of parents enrol, attend, and participate meaningfully in the programme (i.e., is it the "worried well" or is it parents that are truly in need of support?), and which parents are the most resistant to engagement. This information

can then shape effective recruitment and retention strategies to increase and hold uptake (Chacko et al., 2016; Koerting et al., 2013).

Predictors of Engagement

Research from high-income countries suggests that there are numerous baseline characteristics and contextual factors that appear to be associated with engagement in parenting training. However, findings, which are described below, have largely been conflicting. Some studies conclude that certain variables increase engagement, while other studies have found that these same variables decrease or have no impact on this process. This incongruence may be due to differences in sample characteristics at various levels – both those that are specific to the individual as well as those that relate to relationships and contextual factors. Here it is important to note that most studies of parenting training interventions, including those described in this review, include only or mainly mothers in their samples. This means that the current knowledge on engagement is primarily based on the experiences of mothers, and may not generalise to fathers.

SES. Many studies have found that lower SES, or coming from a lower SES neighbourhood, is associated with lower enrolment in parent training (e.g., Baker et al., 2011; Heinrichs, Bertram, Kuschel, & Hahlweg, 2005). For example, in their study of a parenting programme, delivered in New England, USA, to prevent conduct problems in pre-schoolers, Baker and colleagues (2011) found that 83% of parents from a high SES background enrolled in the intervention compared to 38% of parents from lower SES backgrounds. This being said, there have also been studies that found no relationship between SES and enrolment (e.g., Dumas et al., 2007; Gross et al., 2001).

Regarding attendance, there have again been mixed findings with some studies showing an association with SES (Peters, Calam, & Harrington, 2005; Prinz & Miller, 1994) and others not (Baker et al., 2011; Gross et al., 2001; Nix et al., 2009). In their review,

Chacko and colleagues (2016) found that studies that included participants with low SES had consistently higher drop out rates (34%) than those that included participants from higher income backgrounds (24%), with a moderate effect ($d = 0.58$). This finding aligns with results of a meta-analysis, which found a small, yet significant, association between income and drop-out (Reyno & McGrath, 2006).

The relationship between SES and quality of participation is also unclear. Dumas and colleagues (2007) found no link between these variables within the efficacy trial of Parenting Our Children to Excellence (PACE), a group-based programme to promote effective parenting and reduce children's risk of poor outcomes, in Indianapolis and Harrisburg in the USA. On the other hand, Nix and colleagues (2009) found that parent education and parent occupation, which may be related to SES, were significantly related to quality of participation. Parents with lower levels of education and with less occupational prestige tended to participate less actively during programme sessions.

A necessary consideration is that low SES may well be a variable that reflects other issues, such as parenting stress or depression, which may be barriers to engagement, rather than SES itself being the trigger for poor recruitment and retention rates (Morawska et al., 2014). Low SES parents are also more likely to experience logistical barriers to engagement, including limited access to transport and childcare, unstable work schedules, and wariness of interventions due to unpleasant experiences with public services (Winslow, Bonds, Wolchik, Sandler, & Braver, 2009).

Parental age. The role of parental age in predicting engagement is uncertain. Dumas and colleagues (2007) found that younger, and presumably less experienced, mothers were more likely to enrol in parent training than older mothers. However, maternal age was not associated with attendance or quality of participation. Nix and colleagues (2009) found, when considering only zero-order correlations, that being older was slightly related to

parents' attendance at (r = .12; p < .01) and quality of participation (r = .19; p < .01) during group sessions. However, parental age did not uniquely relate to attendance and quality of participation when included in a hierarchical linear model. Peters and colleagues (2005), on the other hand, found that mothers who completed a 10-session parent management training programme were significantly older than those who dropped out.

Race and ethnicity. In some studies in the USA, white families were more likely than minority group families to enrol in programmes (e.g., Baker et al., 2011; Nix et al., 2009). However, in these studies, race is often confounded with SES, with white families typically having higher household incomes than families from other racial groups. Also, minority groups may face significant barriers to accessing and participating in services because of structural and contextual issues, such as childcare responsibilities, a distrust of services, and a shortage of programme facilitators from the same racial or cultural background (Murry et al., 2004). To extend on the last barrier, parents may find facilitators of the same background to be more approachable and so rapport, which may enhance engagement, may be more easily formed (Koerting et al., 2013). It is important to note that in South Africa, the black population, who are the majority group and have the lowest SES overall (Statistics South Africa, 2012), are likely to experience the difficulties experienced by minority groups in the USA.

Marital status. Studies have typically shown that single parent status is related to lower enrolment and attendance rates (e.g., Dumka, Garza, Roosa, & Stoerzinger, 1997; Reyno & McGrath, 2006). Baker and colleagues (2011) found that while being a single parent was not related to enrolment, it was significantly associated with attending fewer programme sessions than parents from dual parent households (48% versus 70%). On the other hand, studies have also found that single parents are more likely to enrol in an intervention (Heinrichs et al., 2005) and be retained in them (Danoff, Kemper, & Sherry,

1994; Dumas et al., 2007; Orrell-Valente et al., 1999). Gross and colleagues (2001) found that enrolment rates for single and married parents were higher than for cohabitating couples.

Parental level of education. Studies tend to show that more highly educated parents attend more programme sessions and are less likely to drop out of services than parents with less education (e.g., Haggerty et al., 2002; Reyno & McGrath, 2006; R. Spoth, Goldberg, & Redmond, 1999; Spoth & Redmond, 1995; Winslow et al., 2009). Parents with a higher level of education may experience fewer literacy-related barriers and may also have higher SES, which may minimise other practical obstacles to engagement. Nix and colleagues (2009) found higher levels of parent education to be uniquely related to a greater quality of participation. Higher parental IQ has also been linked to less drop-out from a parenting programme for parents of hyperactive children (Firestone & Witt, 1982).

Parent social support. A variable less commonly explored as a predictor of engagement is parents' perceived level of social support. Baker and colleagues (2011) found that parents who enrolled in parent training reported significantly greater social support than those who did not. However, they found no significant relationship between this variable and attendance. Nix and colleagues (2009) failed to find a relationship between social support and attendance and quality of participation.

Parental mental health. Variables related to parent mental health are also seldom included in studies investigating engagement in parent training. There have been some studies that found a significant relationship between parenting stress and enrolment (Dumas et al., 2007), parenting stress and drop-out (Calam, Bolton, & Roberts, 2002; Kazdin & Mazurick, 1994), and parental depression and drop-out (Calam et al., 2002; Peters et al., 2005). However, most studies that have included mental health variables appeared to find that they had little or no impact on engagement. For example, Spoth and colleagues (1999) found no association between parents' internalising or externalising problems and retention

in parent training activities. Baker and colleagues (2011) also detected no significant differences between the depression scores of enrolled versus non-enrolled participants, as well as between those who had low or high attendance. Baydar and colleagues (2003), who focused specifically on mental health factors, found that mothers with mental health risk factors had similar levels of engagement to those who did not experience these risk factors. Depression was the only factor that they found to have a small negative effect on programme engagement (effect size = 0.09; $p < .05$). Interestingly, they also found that mothers who reported substance abuse problems had higher levels of engagement than other mothers who used a comparable level of positive parenting and inconsistent parenting practices at baseline.

Parenting behaviour. Although there have been studies that have found a relationship between higher levels of poor parenting at baseline and poor engagement (Kazdin, Stolar, & Marciano, 1995), research tends to show that the opposite is more often the case. For example, Baydar and colleagues (Baydar et al., 2003) found that mothers that used more poor parenting practices at baseline were more likely than other mothers to have continued attendance at an Incredible Years programme in the USA. The authors highlight that these results indicate that even mothers who use poor parenting practices, including those that are harsh or negative towards children, were interested in and motivated to learn new strategies via parent training. Similarly, Gorman-Smith and colleagues (2002) found that parents who used lower levels of parental monitoring at baseline were more likely to participate fully and be immediately responsive to a family-focused prevention programme for substance abuse.

Studies have also shown that higher levels of positive parenting at baseline enhance engagement. For example, Charlebois and colleagues (2001) reported that higher levels of positive interaction between mothers and their sons at baseline was significantly associated with continued attendance at a three-year multicomponent programme for parents of

disruptive young boys.

Child sex and age. Several studies have examined the role of child demographics, specifically children's sex and age, in relation to engagement. Regarding child sex, some found that it is not predictive of engagement (Dumas et al., 2007; Furey & Basili, 1988; Heinrichs et al., 2005; Kazdin & Mazurick, 1994), while others have shown conflicting results in terms of the direction of its relationship with engagement. For example, a study demonstrated that parents of female children with hyperactivity were more likely to drop out than parents of male hyperactive children (Firestone & Witt, 1982). The authors suggest that this may be indicative of a sex bias in that parents may worry more about a boy's behaviour problems than a girl's. In contrast, Dakof, Tejeda, and Liddle (2001) found, in the context of adolescent drug abuse treatment in the USA, and in a primarily African American sample, that families with adolescent girls had a greater chance of continued attendance than those with adolescent boys.

Regarding child age, some studies have shown no relationship between this variable and parental engagement in parent training (Dumas et al., 2007; Kazdin & Mazurick, 1994). On the other hand, some studies (e.g., Dakof et al., 2001; Firestone & Witt, 1982) have indicated that being a parent of a younger child is related to drop-out, while others (e.g., Armbruster & Schwab-Stone, 1994; Prinz & Miller, 1994) have reported that this is instead the case for older children.

Child behaviour. Studies on the relationship between child behaviour and engagement have generated opposing results. Sanders and colleagues (2007) found that Australian parents who reported that their children had experienced emotional or behavioural difficulties were eight times more likely to access professional services for their children's behaviour. A number of studies (e.g., Dumas et al., 2007; Haggerty et al., 2002; Winslow et al., 2009) also found that parents who reported higher levels of child behaviour problems

were more likely to enrol in parent training.

To explicate this finding, it may be that parents enrol because they feel that the programme's goals and content align with their need to address their child's behaviour problems (Winslow et al., 2009). In contrast with these studies, Baker and colleagues (2011), Orrel-Valente and colleagues (1999) and Spoth and colleagues (1999) reported no association between level of child behaviour problems and enrolment. Regarding attendance, numerous studies (Dumas et al., 2007; Peters et al., 2005; Spoth et al., 1999), including a meta-analysis (2006), found no evidence of a relationship between child externalising problems and programme attendance. On the other hand, some studies have found that parents of children with greater levels of behaviour difficulties at baseline are more likely to attend prevention programming (Heinrichs et al., 2005; Sirles, 1990), while others have reported that it is associated with higher drop out rates (e.g., Kazdin & Mazurick, 1994; Prinz & Miller, 1994).

Structural barriers. The literature points to numerous structural barriers that may influence engagement. Time demands are one such barrier commonly identified by parents as a reason for not enrolling in programmes or only attending a few sessions (Garvey et al., 2006; Gross et al., 2001; Koerting et al., 2013; R. Spoth & Redmond, 2000). In a study of parents in the PACES trial in the USA, Dumas and colleagues (2007) were able to quantify the substantial impact of time constraints on engagement. They reported that 38% of mothers who identified significant time constraints said that they would most likely enrol, as opposed to 84% of mothers who identified few constraints. Of relevance was that rates of *actual* enrolment were 13% for those who identified significant constraints and 42% for those who identified few constraints. Attendance rates were also higher for those who identified fewer constraints (63% versus 28%).

For programmes where both parents, or the primary caregiver and a co-parent, are

invited to participate, busy schedules may mean that only one parent can attend – and in most cases, this would be the mother (Whittaker & Cowley, 2012). A consequence of this is that when one parent brings home new parenting techniques, it may cause conflict between them and the other parent or family members, especially if they are different to those already used in the household (Mockford & Barlow, 2004). This situation may be especially difficult for mothers from cultures that are predominantly patriarchal, such as many South African cultures (Dawes & Richter, 2008), where women may have little decision-making power. Whittaker and Cowley (2012) explain that family values are socially persuasive and, if in conflict with the values of new parenting strategies, can undermine an inclination to practice the new strategies at home. A lack of practice then prevents parents from mastering new skills. Also, males within patriarchal cultures may have the power to decide whether or not a female caregiver can enrol in parent training (Axford et al., 2012).

Aside from time constraints, parents may face practical barriers, such as a lack of childcare, transport difficulties, and needing to care for an ill family member, which may make accessing the programme difficult (Koerting et al., 2013). These barriers are likely to be associated with low SES in many ways – for example, lower income parents are more likely to have to rely on public transport, which can be unreliable, and be unable to afford a babysitter or crèche fees. Dumas and colleagues (2007) raise the valid point that practical barriers are often reduced in research studies by scheduling sessions at times and at venues that are convenient for participants as well as by providing food, transportation and childcare. The authors add, though, that these helpful steps may increase the likelihood of engagement but do not change the fact that attending a programme still takes time; also, while they are often feasible in a well-resourced study, they may not be affordable in real-world programme roll-out. Considering this, parents who do not sufficiently engage are not necessarily showing resistance to the programme – they may well be committed, but face

barriers to attending and completing home practice tasks (Staudt, 2006).

Parental motivation and readiness to change. Parental motivation and readiness to change are important factors to consider in the engagement process. Increases in parent motivation have been shown to predict the perception of fewer barriers to participating in an intervention, which was significantly associated with greater attendance at parent training for parents of children with conduct problems (Nock & Photos, 2006). Parents who have a high need for change in their child's behaviour have also been found to complete more homework tasks (Sutton & Dixon, 1986). These findings point to the need to enhance parental motivation and readiness to change. In order to do this, it is necessary to understand how participants perceive the programme's benefits versus the perceived risks of engaging in programming.

Parents may decide not to enrol in parent training if they perceive themselves not to be at risk and that the programme would, therefore be irrelevant or unhelpful for them (Spoth & Redmond, 2000). Improved attendance has been found for parents who see the programme as potentially beneficial (Dumas et al., 2007), and perceive the potential gains from the programme to be greater than the costs (Perrino, Coatsworth, Briones, Pantin, & Szapocznik, 2001). Also, as raised by Whittaker and Cowley (2012), emotional intelligence may play an important role here. As the authors explain, this premise is supported by evidence that attendance is greater for parents who have higher levels of education (Haggerty et al., 2002) and those who are able to express an understanding of the role that they play in managing their child's behaviour (Peters et al., 2005).

These points align with the application of social cognition models, namely the health beliefs model (Rosenstock, 1966) and the theory of planned behaviour (Ajzen, 1991), to the context of engagement in parent training (Calam et al., 2002; Dumas et al., 2007; Spoth & Redmond, 1995; Winslow et al., 2009). These models have been frequently applied by

researchers when investigating protective health behaviours, such as smoking cessation (Norman, Connor, & Bell, 1999), physical activity (Hausenblas, Carron, & Mack, 1997), and safe sex (Rosenstock, Strecher, & Becker, 1994). The health beliefs model suggests that a person is more likely to adopt a health behaviour if they believe that they are at risk for an illness, and that they perceive this illness to be serious, as well as that they consider the benefits of the behaviour to be greater than the barriers (Rosenstock, 1966). The theory of planned behaviour, on the other hand, hypothesises that the probability of a person performing a particular behaviour is determined by the strength of their intention to engage in it (Ajzen, 1991). Intention in turn is shaped by attitude towards the behaviour, subjective norm, and perceived behavioural control – if a person considers the behaviour to be positive, if they feel that there is social pressure to adopt it, and if they perceive them themselves as able to do it, then they are more likely to *intend* to engage in the behaviour, and so are more likely to *actually* engage in it (Ajzen, 1991). Both the health beliefs model and theory of planned behaviour have shown predictive validity in determining intention to enrol and actual attendance in parent training (Thornton & Calam, 2011). However, only one study (Dumas et al., 2007) has looked beyond these elements of engagement and also included quality of participation while applying these models.

While the constructs that make up these social cognition models are useful, the overall models do not provide a full picture of the factors influencing engagement. They place too much emphasis on factors intrinsic to the individual without considering the impact of other, more distal, factors on the likelihood of performing a behaviour – in this case, engaging in parent training. McCurdy and Daro (2001) responded to this limitation by developing a conceptual model of parental involvement in family support programmes, which borrows from these models but includes individual characteristics of the parent and family, facilitator attributes, programme characteristics, and neighbourhood factors. These factors are

hypothesised to impact intention to enrol, enrolment, and retention in parenting services. In a context such as a low-income community in South Africa, parents are likely to face many obstacles to engagement that are outside of their control and so more holistic models, such as the one proposed by McCurdy and Daro (2001), are necessary.

Programmatic factors. Factors related to interventions themselves may impact engagement. Parents may perceive parenting interventions as irrelevant for their circumstances, culturally inappropriate, ineffective (Dumas et al., 2007), or even intrusive (Heinrichs et al., 2005). They may also feel uncomfortable about sharing personal information in a group setting. Conversely, other parents may be drawn to parent training as they like the idea of accessing the social support of a group whose members are in a similar situation - Harachi, Catalano and Hawkins (1997) reported that parents who are more likely to participate in programmes tend to see them as a chance to engage with parents with whom they can share their experiences.

In their qualitative synthesis, Koerting and colleagues (2013) identified multiple programme-related barriers and facilitators of attendance at parenting programmes. Facilitators included when interventions assessed families' actual needs and addressed them by being flexible, adapted to different learning or interaction styles as well as special needs, and provided families with appropriate resources. Additionally, attendance was facilitated by parents having a positive experience of their programme group in terms of having set rules, including participants from similar backgrounds, and being provided with meals, as well as having additional between-session contact (e.g., home visits or telephone contact) with group facilitators. They also found that some group facilitator factors also played a role in facilitating retention in programmes. These factors included the personal qualities of the leader, including an ability to form good relationships with parents, as well as their background and skills. Programmatic barriers to continued engagement included a dislike of

group activities and challenges with group dynamics, viewing the intervention as unhelpful, and experiencing difficulties with following it due to a lack of support from family members and not understanding the content.

Recruitment strategies. The strategies used by programmes to recruit participants may also have an impact on whether or not they enrol in an intervention. Here, it is important to note that recruitment during an efficacy trial may be very different to recruitment in well-established programmes implemented via NGOs. Koerting and colleagues (2013) found that effective advertisements and service promotion, as well as direct recruitment techniques, were a facilitator to accessing programming. The former included advertising the programme through multiple channels, such as posters at locations frequented by parents, via the internet, newspapers, and radio, and exposure at parenting forums. Effective advertisements also included content that was clear and easy to understand, targeted hard to reach parents, and were available in participants' home language. Direct recruitment techniques involved recruiters developing good relationships with parents, being from the same background as parents, being prepared, and using direct channels to reach parents.

Koerting and colleagues (2013) also identified psychological barriers to accessing programmes that could be addressed at the recruitment phase. These barriers included fears and worries, such as a lack of confidence as well as concerns about being judged and about not having skills, and a lack of information or misconceptions about the availability and content of services. They also included stigma, specifically related to a sense of shame about needing help, perceiving that accessing services indicated failure as a parent, and a fear of being labelled negatively, as well as distrust of professionals, and concerns about confidentiality.

Focusing on Programme Engagement in South Africa

Although most of the studies dealing with engagement have been conducted in lower-income contexts within high-income countries, findings may not be generalisable to a lower-income country, like South Africa. While there are certainly communities in high-income countries where parents are exposed to multiple risk factors, such as poverty, high levels of depression, intimate partner violence (IPV), and HIV/AIDS, the scale of exposure is far greater within low- and middle-income countries (Tomlinson et al., 2014). Effects of these risk factors have not been previously explored in relation to engagement in complex contexts, like the townships (i.e., peri-urban shanty towns) of South Africa. Therefore, there is very scarce evidence available in such contexts for understanding what barriers parents face for attending parent training, and how these challenges might be overcome. For example, parents experiencing multiple risk factors may have children who have greater behaviour problems but are disabled from participation by their risk factors, while those with fewer risk factors are more able to attend.

At this stage in South Africa's movement towards the dissemination of evidence-based programming, when there is government interest in investing in and scaling up services, it is essential that implementation processes are explored as a component of prevention research in the country. Findings from this research can then inform recruitment and retention strategies for scale-up efforts. Also, understanding the aspects of implementation that are associated with positive outcomes may be central to developing systems to monitor and maintain intervention effectiveness as it is implementation in routine practice (Berkel et al., 2016). Gaining this type of understanding is not only relevant to the South African context, but may also be useful to the many other low- and middle-income countries in which plans are being made to disseminate parenting interventions widely.

Chapter 3: The Development and Evaluation of the SCFP

Since this doctoral work was nested within the RCT of the SCFP, this chapter provides contextual background by outlining the development and evaluation of this intervention. Specifically, it discusses programme content, intervention development and piloting, as well as various components of the RCT, including a description of the field team, study setting, procedure, analysis, results, and ethical considerations. This chapter, therefore, serves to orient the reader before presenting the work specifically on engagement. It provides information on the procedures used to collect the quantitative data used in the models that will form the basis of this thesis, and which will be described in Chapters 6 and 7. Details on the specific measures used will be discussed in Chapter 6 to avoid duplication.

Programme Content

The SCFP, which is delivered over 12 weekly sessions (see Table 1), combines evidence-based parenting principles within a local context for at-risk families in South Africa. Programme content is grounded in social learning theory, which proposes that children's exposure to ineffective parenting contributes to them developing behaviour problems (Bandura, 1977). The first six sessions focus on developing a positive parent-child relationship, and include content on establishing parent goals around child behaviour, spending quality time with children through child-led play, descriptive commenting, communicating about emotions, using labelled praise, and using rewards to encourage positive behaviour (Lachman et al., 2016a). The final six sessions then move on to learning limit setting and non-violent discipline strategies. These strategies include giving positive and clear instructions, establishing household rules, ignoring negative attention-seeking behaviour, using "5-minute cool-down" (i.e., Time-Out) for aggressive behaviour or non-compliance, using realistic consequences, and involving children in problem-solving (Lachman et al., 2016a).

Content also addresses children's safety in high crime communities, developmentally appropriate ways to talk with children about HIV/AIDS and poverty, and simple mindfulness exercises to reduce stress associated with parenting and other social factors (Lachman et al., 2016a). Local cultural values, including respect and social responsibility, are infused into the programme through traditional stories and songs.

Table 1

Topics Covered in the SCFP Sessions

Session No.	Session Topic
Session 1	Quality time with you and your child
Session 2	Quality time with your child: Say what you see
Session 3	Quality time with your child: Naming feelings
Session 4	Praising our children
Session 5	Rewards
Session 6	Giving clear and positive instructions to our children
Session 7	Keeping our children safe: Household rules
Session 8	Ignoring difficult behaviours
Session 9	5-minute cool down: Supporting household rules
Session 10	5-minute cool down: Support to follow instructions
Session 11	Consequences and problem-solving
Session 12	Reflection and moving on

The sessions follow a similar format and typically run for about two and a half hours each. They begin with home practice discussion where parents report on their experience of implementing taught parenting skills at home with the target child during the previous week.

Parents are then introduced to the session's core skill, guided through illustrated stories (i.e., cartoon strips depicting scenes of typical South African families using the parenting skills either correctly or incorrectly), and then practice new skills in role-plays. The sessions close with parents receiving home practice exercises to implement during the following week. Home practice, also used by evidence-based programmes like Triple P (Sanders, 2012), The Incredible Years (Borden et al., 2010) and Parent Management Training – Oregon Model (Bullard et al., 2010), is essential since between-session implementation of new skills is one of the hypothesised mechanisms of change in behavioural parent training (Berkel et al., 2016; Chacko et al., 2016).

Intervention Development and Piloting

The development of the SCFP, outlined in a detailed article by Lachman and colleagues (2016b), was guided by the United Kingdom Medical Research Council's framework for designing and evaluating complex social interventions (Craig et al., 2008). The process, which began in 2012, involved using three steps - these included identifying core components of evidence-based parenting programmes, conducting a qualitative formative evaluation with community-based workers and parents, and integrating the collected information into intervention materials and delivery protocols (Lachman et al., 2016b). Aside from enabling the development of an evidence-informed programme, this process was central to creating an intervention that parents would be likely to find accessible and acceptable, and so increase their engagement with it. For example, parents commented in focus groups that providing food and transport reimbursements would encourage attendance and so these incentives were offered in the programme (Lachman et al., 2016b).

In 2013, the first version of the SCFP was then evaluated via a pilot RCT with 68 parent-child dyads in Khayelitsha, a township in Cape Town (Lachman et al., forthcoming). Given the relatively small sample size, findings were promising and indicated that the

programme led to a significant increase in the intervention group versus the control group in parents supporting positive behaviour (e.g., playing, rewarding, problem-solving; Lachman et al., forthcoming). These results supported the programme being tested in a larger RCT with greater power to detect change.

Evaluation via RCT

After pilot-testing, some revisions, which were based on facilitator and parent feedback, were made to the programme. For example, parents found the concept of "Time Out" difficult to grasp in one session, so the programme was adjusted to cover this strategy over two sessions. The strategy was also renamed "5-minute cool down" to be more comprehensible to parents, and also to bring it in line with recent practices that use it as a strategy to help children calm down and manage their emotions (Havighurst, Kehoe, Harley, & Wilson, 2015). The revised SCFP was then evaluated via a larger trial (with a one-year follow-up) from 2014 to 2016 to determine the intervention's efficacy in addressing a range outcomes (N = 296 parent-child dyads; Ward et al., forthcoming). Primary outcomes included harsh parenting, positive parenting, and child behaviour problems – assessment of these outcomes was based on both parent self-report and observational data. Although study measures will be discussed in detail in Chapter 6, a list of those used is presented below in Table 2.

Table 2

List of Primary Outcome Measures

Outcome	Measure	Subscales included
Harsh parenting	ISPCAN Child Abuse Screening Tool – Parent Version (Revised; ICAST-P; Runyan et al., 2009)	Non-violent discipline Physical discipline Psychological discipline Severe physical discipline* Sexual abuse* Neglect*
	Sinovuyo Observational Coding System (SOCS; Mlothswa, 2013)	Negative parent behaviour
Positive parenting	Parenting Young Children (PARYC; McEachern et al., 2012)	Supporting positive behaviour Setting limits
	SOCS (Mlotshwa, 2013)	Positive parent behaviour
Child behaviour problems	Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999)	Intensity Scale Problem Scale
	SOCS (Mlotshwa, 2013)	Positive child behaviour Negative child behaviour

* There was a very low frequency of these behaviours and so they were excluded from the analyses.

Field team. The field team for the RCT consisted of myself, who held the role of trial manager, six research assistants, a programme coordinator, four programme facilitators, six security escorts per wave (one per research assistant), and at least one volunteer intern at any given time. All research assistants, the programme coordinator, security escorts, and programme facilitators were required to be fluent in both English and the local language, isiXhosa.

Research assistants were recruited to work on the pilot and main RCT based on relevant experience. They were all female, had completed high school but had no tertiary education, and were from similar cultural and socio-economic backgrounds to participants. They received a 5-day training in 2013 before the pilot trial, which covered informed consent processes, data collection techniques, research ethics, and referral procedures. An additional 3.5-day training was provided before the RCT, with refresher training before the one-year follow-up.

Facilitators were recruited via a formal selection process run by the implementing NGO, CWBSA. Recruitment criteria required facilitators to be parents themselves, have prior experience facilitating group processes, have completed high school, and have received basic training in early childhood development (Lachman et al., 2016a). The four facilitators were all female with a mean age of 34.25 (SD = 3.30) at the start of the RCT. Before the pilot trial, they received training in collaborative facilitation techniques and positive parenting principles (30 hours over 5 days), weekly training on specific session content during implementation (20 hours), and experiential training by participating in the programme prior to facilitating it themselves (24 hours; Lachman et al., 2016b). They also participated in weekly supervision sessions that involved watching video recordings of sessions to identify areas for improvement, group problem-solving and role-playing, and planning for the following week's session (Lachman et al., 2016a). They received a two-day

refresher training session before the RCT, with weekly video supervision during programme implementation.

Study setting. Due to constraints in the capacity to deliver the programme (we had too few trained group facilitators to run more than five programmes in a week), data collection and programme delivery for the RCT occurred in two waves. The first wave was conducted in Municipal Wards 87 and 89 in Khayelitsha and the second in Wards 37 and 39 in Nyanga. Khayelitsha and Nyanga are both townships in Cape Town, South Africa – in South Africa, the term "township" typically refers to the underdeveloped residential areas that were reserved for "non-whites" during Apartheid (Pernegger, 2007). According to the 2011 national census, they have populations of approximately 391 749 and 57 996, respectively, with 99% of residents classified as "Black African" (Statistics South Africa, 2012). IsiXhosa, one of South Africa's 11 official languages, is most commonly spoken in these townships, with 90% of residents identifying this as their mother tongue (Statistics South Africa, 2012).

Census data from 2011 also indicates that levels of poverty in these areas are high with 74% of households having a monthly income of R3200 (≈ USD 236) or less (Statistics South Africa, 2012). Additionally, 38% and 45% of the labour force in Khayelitsha and Nyanga, respectively, are unemployed – these rates are higher than the national average of 30% (Statistics South Africa, 2012). In South Africa, unemployed people do not receive any money from the state, although there are means-tested grants for the disabled, the elderly, and those who have children or foster children (Nama & Swartz, 2002). Some households may receive multiple social grants depending on their composition, which contributes to variation in income levels in these communities.

Many residents in Nyanga and Khayelitsha live in informal structures with limited access to running water, adequate sewerage disposal, and electricity. Crime and violence are

rife, with both townships being listed in the worst ten precincts in the Western Cape in 2015 for, among other offences, murder (132 per 100 000 for Nyanga - the highest rate in South Africa; 120 per 100 000 for Khayelitsha; Western Cape Government, 2013). These sites also have high HIV prevalence rates – 33% in Khayelitsha and 28% in Nyanga (City of Cape Town, 2013). Since residents face multiple risk factors for adverse social and health outcomes, these townships are critical areas for prevention and early intervention efforts.

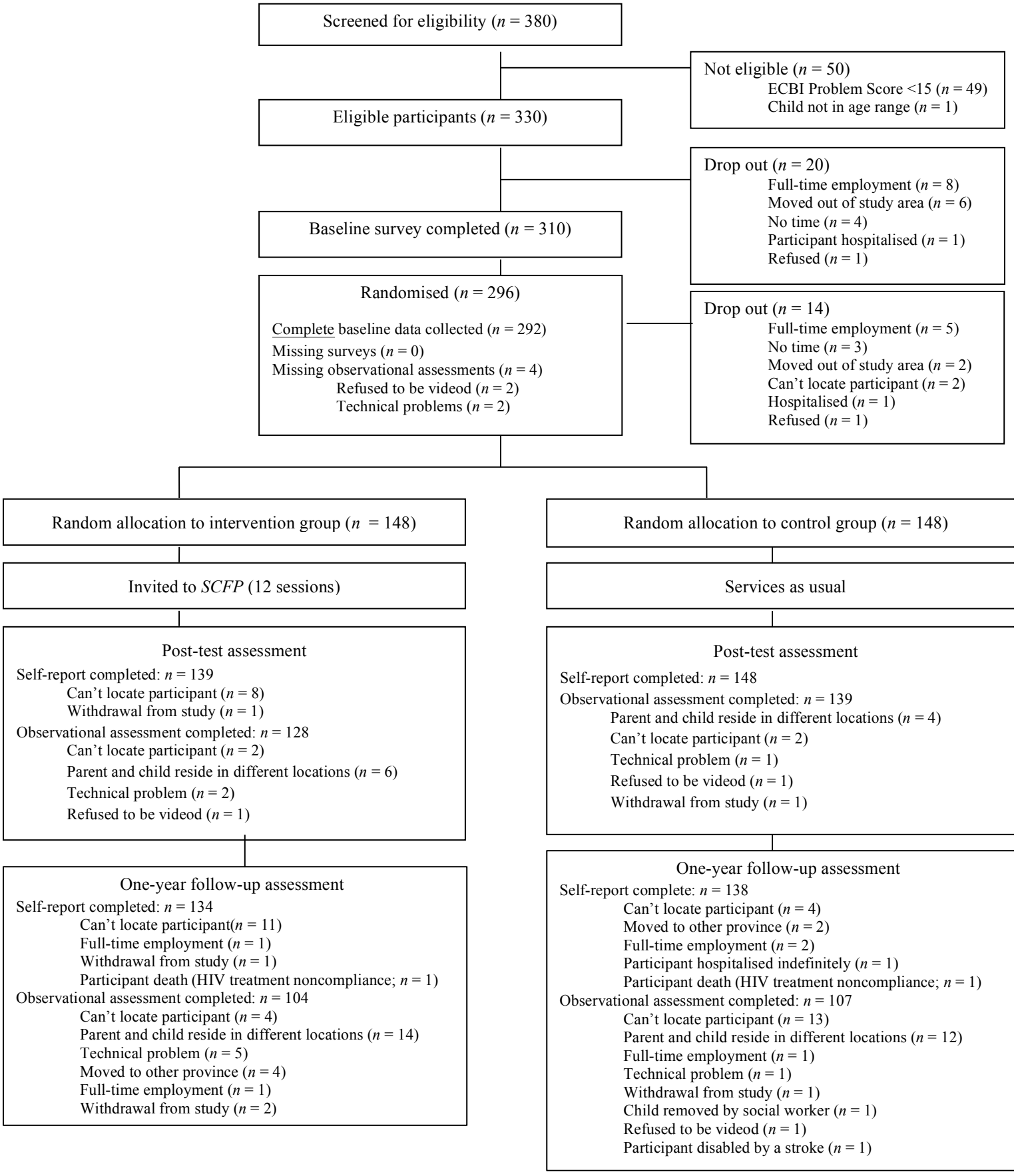
Negotiating entry into these study sites involved members of the field team meeting with Ward Councillors and community development forums, introducing the project to the local police, and networking with local NGOs. These negotiations were essential in that they increased the perceived trustworthiness of the team and so made it easier to access participants (Casale, 2013). Due to the legacy of South Africa's racialised past, field staff had to work especially hard to gain the support of community leaders, particularly since the study's principal investigators and trial manager were white. There was an expectation that there would be financial compensation to the wards' leadership in return for community entry, but this was neither feasible nor ethical. Instead, the team explained the potential benefits that the study would have for the communities and that participants would receive compensation and a certificate for their time.

Negotiations with community leaders also increased the team's safety in the field by enabling access to security escorts through the Ward Councillors and community development forums. Safety was a top priority for the project, and even with the escorts, the team experienced two armed robberies and witnessed two fatal shootings and a number of robberies when conducting fieldwork activities. Aside from increasing the team's safety, using escorts also enabled unemployed community members to gain short-term employment.

Study procedure.

Screening and baseline assessment. After gaining approval to enter the community, research assistants used door-to-door recruitment (Wave 1: *n* = 162; Wave 2: *n* = 198), as well as a few referrals from a local child protection agency (Wave 1: *n* = 18; Wave 2: *n* = 0) and school (Wave 1: *n* = 2; Wave 2: *n* = 0), to locate participants to screen for study eligibility (see Figure 1 for the RCT's CONSORT - Consolidated Standards of Reporting Trials (Altman et al., 2001) - diagram). To be eligible for study inclusion, isiXhosa-speaking parents had to identify themselves as a primary caregiver (i.e., the person mainly responsible for caring for a child) of at least one child aged between two and nine years. Because many low-income children in South Africa are raised by multiple caregivers (Bray & Brandt, 2007), non-biological parents and family members were also eligible provided that they met the other inclusion criteria (Lachman et al., 2016a). These criteria required that parents live in the same household as the target child for at least four nights per week and be available for daytime programme sessions. The caregiver also needed to have reported 15 or more child behaviour problems on the ECBI Problem Scale (Eyberg & Pincus, 1999). The clinical cut-off of 15 problems was used to recruit parents who were at risk of using harsh discipline practices to manage their children's behaviour, and who would likely be motivated to participate in a parenting programme that addresses child behaviour difficulties (Lachman et al., in press.). For the screening process, parents with more than one child in the targeted age range were asked to select the child whose behaviour they found to be the most challenging to manage. Eligible parents would be asked about this child in subsequent assessments.

Figure 1. *CONSORT Diagram from the RCT of the SCFP*



To ensure privacy, research assistants conducted the screening survey in a private room in the participants' home or at a time when the participant was alone. This survey, like the other surveys in the RCT, was conducted via mobile phone using the Mobenzi Researcher application (http://www.mobenzi.com/researcher/home). Not only did this system increase confidentiality as survey data is typically submitted immediately, but it worked well in a context where theft is very common and paper surveys could be lost in this way.

Of the 380 participants that were screened, 330 (86.84%) of them were eligible to participate in the study and were contacted for the baseline assessment. This eligibility rate, which is very high considering that door-to-door recruitment was predominantly used, indicates that a large proportion of children in townships may be experiencing significant behaviour problems. Considering this, the SCFP, although selective in nature, could be viewed as a universal intervention within the targeted communities.

Baseline data included a mobile-assisted survey (See Appendix A) and an observational assessment, both of which were administered in participants' homes. For the observational assessment, research assistants supplied parents with a standardised bag of toys and sandwich supplies. They filmed, via mobile phone video camera, the parent and child interacting during set tasks for 20 minutes. These tasks included the parent and child playing together for 10 minutes, the child tidying up the supplied toys and giving them back to the research assistant, and then the parent and child preparing and eating a sandwich together for 10 minutes. The research assistant gave the parent set instructions on how to introduce the tasks to the child. Screening and baseline procedures took place during March and April 2014 for Wave 1, and from the end of June to mid-August 2014 for Wave 2.

Baseline self-report data was collected from 296 participants, while observational data was collected from 292 of them. After each wave of baseline data collection, participants were invited to participate in a Health and Wellness Day where they received information on

healthy eating, exercise, and finances, as well as refreshments – just under a fifth of the participants (n = 57; 19.26%) attended.

Randomisation. The 296 participants, from whom baseline data was collected, were randomised to either the intervention or services-as-usual control group using block randomisation so that the sample was stratified by child age group and by sex. This procedure, which was conducted by an off-site statistician, ensured balanced proportions of male and female children as well as of two- to five-year-olds and six- to nine-year-olds in each group. In Wave 1 (n = 137 participants), 68 participants were allocated to the control group and 69 to the intervention group. In Wave 2 (n = 159 participants), 80 participants were allocated to the control group, and 79 participants were allocated to the intervention group. Throughout data collection, research assistants were blind to whether a particular participant was assigned to the intervention or control group.

Intervention delivery. Intervention group participants received a one-on-one pre-programme consultation from a facilitator. The purpose of this visit was for the facilitators to introduce themselves and the programme to participants and so increase the likelihood of parents enrolling in the intervention. These visits were recommended by parents in the pilot trial and have also been used in other evidence-based programmes in high-income countries (Hutchings et al., 2007) and suggested as a possible strategy for increasing enrolment rates (Axford et al., 2012; Ingoldsby, 2010). If parents were not available for this consultation, facilitators contacted them telephonically and ran through the content of the visit that way. During this in-person or telephonic meeting, facilitators discussed the target child to establish what problems the parent wanted to address during the programme.

Two pairs of facilitators delivered the SCFP to groups of between 11 and 17 (M = 13.45; SD = 1.57) parents over 12 weekly sessions (from June to August 2014 for Wave 1 and from September to November 2014 for Wave 2), with process data collected throughout

this time. This data included data on attendance rates, parent report after each session of their understanding of the taught skills and their confidence in implementing them at home, facilitator report after each session of participants' quality of participation, parent report of weekly home practice completion, as well as overall satisfaction with the programme. Parents were invited to bring a co-parent (i.e., someone else who played a caregiving role in the target child's life) to the programme – the rationale for this was that parents could be supported in the home when applying new skills. Only five participants brought co-parents, who were all female relatives, to sessions.

The programme was delivered in the mornings on Tuesdays to Saturdays, with participants allocated to parenting groups based mainly on their response to a baseline survey item asking which days would be the most convenient for them to attend sessions. The team also wanted to deliver the programme in the evenings to engage parents who worked during the day, but were unable to do so because of safety concerns in the targeted communities. Sessions were delivered at community venues close to participants' homes.

The SCFP had numerous strategies in place to strengthen treatment fidelity. These strategies included having a facilitator manual and parent handbook. Programme sessions were filmed with the footage used in weekly supervision sessions – this enabled facilitators to show the supervisor situations that were challenging or that went well – this, in itself, is a form of fidelity monitoring. At the end of each session, facilitators completed a checklist in which they were required to indicate which session components they did or did not complete. I analysed these self-report checklists, with results indicating that facilitators implemented 96.80% of the manualised activities during programme implementation (see Appendix B). This figure was verified as having 100% reliability by examining a randomly selected video from each of the 11 parenting groups.

In order to enhance engagement once programme sessions had begun, facilitators provided home visits to parents who were having difficulties with content or who were missing sessions. Since there was limited capacity with only four facilitators, not everyone needed a home visit was able to receive one. Also, some parents were not at home or avoided the facilitator when they came to do a visit. Weekly text messages served as boosters to remind parents of home practice activities and encourage attendance. However, these messages may not have always been received due to many participants having to share mobile phones among family members, changing mobile numbers, and having phones stolen over the course of the SCFP.

The programme also encouraged participants to form a "Sinovuyo partner" relationship with another parent in their group. This relationship could serve as an avenue for peer support that was external from group sessions. Finally, the programme provided unconditional reimbursements for public transport (i.e., distributed even if participants walked to the programme), snacks and lunch at each session, and a warm space with blankets and heaters during winter.

Post-test and one-year follow-up assessments. Immediately after the programme had been completed, research assistants returned to participants' homes to collect post-test data. This round of fieldwork was conducted between September and October 2014 for Wave 1 and January and February 2015 for Wave 2. Data collection culminated with the one-year follow-up, which took place between September and October 2015 and January and February 2016 for Waves 1 and 2 respectively. The post-test and one-year follow-up surveys and observational assessments had the same format as the baseline with the exception of the introductions and closing remarks. Overall retention rates were high at both follow-ups (post test: survey (97%); observational assessment (90%)/one-year follow-up: survey (92%); observational assessment (71%)).

After conducting the one-year follow-up assessment, research assistants shared a brief summary of the baseline findings with participants. This summary was in the form of a one-page double-sided document written in plain language and translated in isiXhosa (see Appendix C). Participants also received a certificate for their involvement in the study (see Appendix D).

Data checking. In order to monitor the quality of data during the RCT, I conducted spot checks on the research assistants' work by shadowing their visits to participants. After these checks, I gave them constructive feedback on their entry into homes, their interviewing style, and technique in giving instructions for, and filming, the observational assessments. Another member of the research team, who was more closely involved in the implementation of the SCFP, monitored process data collection.

Regarding data checking, each baseline, post-test and one-year follow-up survey was checked within five working days of submission either by a project intern or me. Where missing data or errors were detected during the checking process, research assistants went back to participants for correction, if possible and appropriate. To check observational assessments, I watched the first four videos from each research assistant for each fieldwork wave to ensure that correct procedures and filming techniques were used. After that, the project intern conducted quality control checks on videos after they were collected from research assistants.

Coding of observational assessments. Two coders used the SOCS to code the 10-minute play section of the observational assessments. Due to funding and capacity challenges, it was not possible to code the full 20-minute observation. The coders dual-coded almost half of the videos (n = 383; 43%), and achieved intraclass correlation coefficients of .70 or more for all codes (Aspland & Gardner, 2003). I was responsible for

initial coder training, monitoring inter-rater reliability, and conducting booster training when inter-rater reliability dropped below .70.

Data analysis. Data from all three time-points was merged in Microsoft Excel and then imported into Statistical Package for the Social Sciences (SPSS) Version 23.0 (IBM, 2015). After data cleaning, missing data was imputed by multiple imputation. Although there was little missing data (see Table 3 below), multiple imputation was conducted in order to align the RCT analysis with best practice in research trials (Little et al., 2012).

Table 3

Missing Data at Each Assessment Time-point

Outcome	Baseline (*n* missing)	Post-test (*n* missing)	One-year follow-up (*n* missing)
ECBI Intensity	0	9	26
ECBI Problem	0	9	26
ICAST-P non-violent discipline	1	12	26
ICAST-P physical discipline	1	10	25
ICAST-P psychological discipline	0	10	25
PARYC Frequency	0	10	25
PARYC Problem	3	14	25
SOCS positive parent (observed)	4	29	85
SOCS positive child (observed)	4	29	85
SOCS negative parent (observed)	4	29	85
SOCS negative child (observed)	4	29	85

The imputation was done in R using multivariate imputation by chained equations (MICE; van Buuren & Groothuis-Oudshoorn, 2011), specifically using random forest (Liaw & Wiener, 2002). Individual items, rather than total scores, were imputed using all variables included in the modelling measured at the current and preceding time-points. Five imputed datasets, which is considered an acceptable number, were generated (Schafer, 1997). Rubin's rules (Rubin, 2004) were used to obtain effect size estimates and CIs that account for both the imputation procedure and sampling variability.

Generalised linear mixed models were applied to the data as they allowed for the outcomes to follow a non-normal, but parametric, distribution, as well as for the longitudinal nature of the study. First, an intention-to-treat analysis, which includes all randomised participants was conducted (Shah, 2011) – the aim of this analysis was to estimate the difference between the intervention and control arms in changes from baseline measurement to post-test measurement, and from baseline measurement to one-year follow-up measurement. Intention-to-treat analysis remains the standard technique used for evaluating the credibility of findings based on RCTs, as the estimated treatment effect is unbiased (Gross & Fogg, 2004).

Following the intention-to-treat analysis, a per protocol analysis was also carried out to provide an indication of whether the programme was effective with those who actually attended. Unlike in the intention-to-treat analysis, which compared the intervention and control groups in their entirety, the per protocol analysis compared participants who attended seven or more sessions (i.e., "high attenders") with the control group. Using this cut-off for the intervention group, 77 participants (52.03% of the intervention group) were included as high attenders. Based on results from independent samples t-tests and Mann-Whitney U tests for continuous variables and Chi-squared tests for categorical variables, there were no statistically significant differences between the high attenders and the rest of the intervention groups at baseline.

Results. Descriptive statistics from the observed data are presented in Tables 4 to 6. A table is presented for each time-point, and includes descriptives for the control group, the intervention group as used in the intention-to-treat analysis, as well as the intervention group as used in the per protocol analysis.

Table 4

Descriptive Statistics Based on Observed Data (Baseline)

	Possible Range	*M (SD)*	Min	Median (Q1, Q3)	Max
Emotional punishment					
Control	0-40	6.73 (5.28)	0	5 (3, 9)	30
Intervention (intention-to-treat)	0-40	6.66 (4.37)	0	6 (3, 9)	20
Intervention (per protocol)	0-40	6.44 (4.28)	0	6 (3, 9)	17
Non-violent discipline					
Control	0-16	6.34 (3.29)	0	6 (4, 9)	14
Intervention (intention-to-treat)	0-16	6.42 (3.24)	0	6 (5, 8.50)	14
Intervention (per protocol)	0-16	6.66 (3.00)	0	6 (5, 8.25)	14
Physical punishment					
Control	0-28	4.67 (4.19)	0	4 (2, 7)	22
Intervention (intention-to-treat)	0-28	4.22 (3.47)	0	4 (2, 6)	15
Intervention (per protocol)	0-28	4.26 (3.69)	0	4 (2, 6)	15
Positive child (observed)					
Control	0+	27.94 (23.94)	0	20 (9, 47)	101
Intervention (intention-to-treat)	0+	26.76 (20.07)	0	22 (10, 41)	87
Intervention (per protocol)	0+	28.48 (20.82)	1	22 (11, 44)	87
Negative child (observed)					
Control	0+	1.75 (2.92)	0	0 (0, 2)	17
Intervention (intention-to-treat)	0+	1.71 (3.98)	0	0 (0, 2)	36
Intervention (per protocol)	0+	2.30 (5.18)	0	1 (0, 2)	36
Positive parent (observed)					
Control	0+	12.63 (10.32)	0	10 (5-16)	52
Intervention (intention-to-treat)	0+	15.27 (15.54)	0	11 (5-22)	125
Intervention (per protocol)	0+	16.61 (18.23)	0	11 (6-22)	125
Negative parent (observed)					
Control	0+	2.86 (3.37)	0	2 (0, 4)	17
Intervention (intention-to-treat)	0+	3.14 (4.59)	0	2 (1, 4)	36
Intervention (per protocol)	0+	3.13 (3.82)	0	2 (1, 4)	25

Table 4 (Continued)

Descriptive Statistics Based on Observed Data (Baseline)

	Possible Range	*M (SD)*	Min	Median (Q1, Q3)	Max
Child behaviour (Intensity)					
Control	0-252	143 (23.14)	89	142.50 (126, 157.20)	225
Intervention (intention-to-treat)	0-252	141.20 (22.85)	89	142 (125.80, 155.20)	201
Intervention (per protocol)	0-252	141.80 (22.56)	89	143 (129, 154)	201
Child behaviour (Problem)					
Control	15-36	25.16 (4.94)	15	26 (21, 28)	36
Intervention (intention-to-treat)	15-36	24.61 (5.07)	15	25 (20, 29)	36
Intervention (per protocol)	15-36	24.55 (4.74)	15	25 (21, 28)	34
Positive parenting (Frequency)					
Control	0-84	49.23 (11.42)	10	52 (44, 56)	74
Intervention (intention-to-treat)	0-84	47.55 (9.31)	19	48 (42, 53)	74
Intervention (per protocol)	0-84	48.40 (8.26)	28	48 (44, 52)	74
Positive parenting (Problem)					
Control	0-14	4.78 (3.96)	0	4 (1, 8)	13
Intervention (intention-to-treat)	0-14	4.38 (3.36)	0	4 (2, 6)	14
Intervention (per protocol)	0-14	4.29 (3.11)	0	4 (2, 6)	12

Table 5

Descriptive Statistics Based on Observed Data (Post-test)

	Possible Range	*M (SD)*	*Min*	*Median (Q1, Q3)*	*Max*
Emotional punishment					
Control	0-40	3.72 (3.94)	0	3 (1, 5)	24
Intervention (intention-to-treat)	0-40	3.14 (3.25)	0	2 (1, 5)	18
Intervention (per protocol)	0-40	2.76 (2.85)	0	2 (1, 4)	12
Non-violent discipline					
Control	0-16	5.18 (2.94)	0	5 (3, 7)	13
Intervention (intention-to-treat)	0-16	5.43 (2.93)	0	5 (3, 7)	14
Intervention (per protocol)	0-16	5.47 (2.63)	0	5 (4, 7)	13
Physical punishment					
Control	0-28	2.77 (3.25)	0	2 (0, 4)	16
Intervention (intention-to-treat)	0-28	1.99 (2.83)	0	1 (0, 3)	18
Intervention (per protocol)	0-28	1.64 (2.38)	0	1 (0, 2)	11
Positive child (observed)					
Control	0+	24.11 (21.17)	0	20 (7.50, 33)	102
Intervention (intention-to-treat)	0+	26.10 (22.57)	0	18 (11, 35)	107
Intervention (per protocol)	0+	30.18 (22.38)	0	22 (12, 47)	98
Negative child (observed)					
Control	0+	1.42 (3.17)	0	0 (0, 1)	23
Intervention (intention-to-treat)	0+	1.51 (2.33)	0	0.50 (0, 2)	12
Intervention (per protocol)	0+	1.51 (2.03)	0	1 (0, 2)	10
Positive parent (observed)					
Control	0+	8.79 (8.45)	0	6 (3.50, 12)	58
Intervention (intention-to-treat)	0+	14.23 (14.95)	0	10 (4, 20)	102
Intervention (per protocol)	0+	14.97 (13.39)	0	12 (6, 21)	68
Negative parent (observed)					
Control	0+	2.49 (3.73)	0	1 (0, 3)	25
Intervention (intention-to-treat)	0+	2.67 (3.52)	0	2 (0, 3)	23
Intervention (per protocol)	0+	2.53 (2.92)	0	2 (0, 3)	13

Table 5 (Continued)

Descriptive Statistics Based on Observed Data (Post-test)

	Possible Range	*M (SD)*	Min	Median (Q1, Q3)	Max
Child behaviour (Intensity)					
Control	0-252	115.60 (27.50)	55	116 (93, 133)	202
Intervention (intention-to-treat)	0-252	111.60 (24.82)	42	113 (94, 130)	166
Intervention (per protocol)	0-252	108.10 (26.60)	42	108 (92, 126.50)	166
Child behaviour (Problem)					
Control	15-36	18.03 (8.46)	0	18.50 (11.75, 24)	36
Intervention (intention-to-treat)	15-36	16.05 (7.93)	0	16 (10, 22)	36
Intervention (per protocol)	15-36	14.27 (8.07)	0	14 (8, 21)	34
Positive parenting (Frequency)					
Control	0-84	49.88 (11.33)	17	51 (43.50, 58)	74
Intervention (intention-to-treat)	0-84	54.86 (9.37)	25	56 (50.50, 59.50)	79
Intervention (per protocol)	0-84	57.92 (8.02)	25	58 (53, 62)	79
Positive parenting (Problem)					
Control	0-14	3.66 (3.78)	0	2 (1, 6)	15
Intervention (intention-to-treat)	0-14	2.75 (3.31)	0	1 (1, 4)	14
Intervention (per protocol)	0-14	1.80 (2.62)	0	1 (0, 2)	13

Table 6

Descriptive Statistics Based on Observed Data (One-year Follow-up)

	Possible Range	*M (SD)*	Min	Median (Q1, Q3)	Max
Emotional punishment					
Control	0-40	2.44 (2.94)	0	2 (0, 4)	13
Intervention (intention-to-treat)	0-40	2.48 (2.50)	0	2 (0, 4)	11
Intervention (per protocol)	0-40	2.29 (2.57)	0	3.75 (2, 10)	10
Non-violent discipline					
Control	0-16	4.21 (2.46)	0	4 (2, 6)	12
Intervention (intention-to-treat)	0-16	4.92 (2.93)	0	5 (3, 7)	12
Intervention (per protocol)	0-16	4.84 (2.86)	3	7 (4.50, 11)	11
Physical punishment					
Control	0-28	1.50 (1.94)	0	1 (0, 2)	9
Intervention (intention-to-treat)	0-28	1.49 (2.27)	0	0 (0, 2)	13
Intervention (per protocol)	0-28	1.33 (2.38)	0	2 (0, 12)	12
Positive child (observed)					
Control	0+	16.39 (14.90)	0	12 (5, 23)	68
Intervention (intention-to-treat)	0+	18.57 (18.55)	0	11 (6, 24.50)	86
Intervention (per protocol)	0+	18.71 (18.69)	5.50	26.50 (10, 76)	76
Negative child (observed)					
Control	0+	2.49 (5.74)	0	1 (0, 3)	49
Intervention (intention-to-treat)	0+	1.88 (2.84)	0	1 (0, 2)	14
Intervention (per protocol)	0+	0.80 (1.84)	0	0 (0, 8)	8
Positive parent (observed)					
Control	0+	6.79 (6.62)	0	5 (2, 9.50)	39
Intervention (intention-to-treat)	0+	10.83 (15.57)	0	6 (2, 14)	103
Intervention (per protocol)	0+	14.97 (13.39)	0	12 (6, 21)	68
Negative parent (observed)					
Control	0+	2.49 (5.74)	0	1 (0, 3)	49
Intervention (intention-to-treat)	0+	1.88 (2.84)	0	1 (0, 2)	14
Intervention (per protocol)	0+	1.94 (2.95)	0	1 (0, 2)	14

Table 6 (Continued)

Descriptive Statistics Based on Observed Data (One-year follow-up)

	Possible Range	*M (SD)*	Min	Median (Q1, Q3)	Max
Child behaviour (Intensity)					
Control	0-252	104.20 (26.81)	46	103 (84, 122)	173
Intervention (intention-to-treat)	0-252	100.60 (26.64)	43	98 (80, 117)	174
Intervention (per protocol)	0-252	98.21 (28.07)	43	92 (78.25, 116)	174
Child behaviour (Problem)					
Control	15-36	13.01 (8.73)	0	12 (6, 19)	35
Intervention (intention-to-treat)	15-36	12.78 (8.48)	0	11 (6, 17)	34
Intervention (per protocol)	15-36	11.89 (8.33)	0	10 (6, 16.75)	32
Positive parenting (Frequency)					
Control	0-84	53.62 (8.99)	23	54 (49, 59)	73
Intervention (intention-to-treat)	0-84	53.05 (9.99)	24	54 (48, 60)	73
Intervention (per protocol)	0-84	53.21 (10.98)	24	54 (48.25, 60.75)	73
Positive parenting (Problem)					
Control	0-14	1.76 (2.41)	0	1 (0, 3)	10
Intervention (intention-to-treat)	0-14	1.89 (2.75)	0	1 (0, 3)	12
Intervention (per protocol)	0-14	1.91 (2.65)	0	1 (0, 3)	12

Results from the intention-to-treat analysis are shown in the left-hand column of Table 7 on page 55. Both the intervention and control group participants increased their frequency of positive parenting based on their responses on the PARYC. This increase was significant from baseline to the one-year follow-up for the control group, and at both time-points for the intervention group. There was a significant difference in the degree of increase from baseline to post-test between the two groups with the increase among the intervention group being 10% larger than the increase among the control group. There was no difference in increases from baseline to one-year follow-up between the two groups.

There was also a significant decrease in the PARYC problem score for both groups, indicating a reduction in parents' perception of implementing positive parenting as difficult for them. Specifically, there was a 22% decrease from baseline to post-test and 48% decrease from baseline to one-year follow-up for the control group. For the intervention group, there was a 29% decrease from baseline to post-test, and a 40% decrease from baseline to one-year follow-up. The differences between the groups at both time-points were not significant.

In both groups, the use of non-violent discipline strategies (e.g., explaining why something was wrong or taking away privileges), as measured via the ICAST-P, declined over the course of the study, but the intervention group was still using more non-violent strategies than the control group at both the post-test and one-year follow-up. This difference in non-violent strategy usage was significant at the later time-point. In terms of harsh discipline, also assessed using the ICAST-P, the intervention group used significantly fewer physical and emotional punishment strategies than the control group at post-test. Both groups reported a decrease at the one-year follow-up, and the two groups were no longer statistically different at this point.

According to the ECBI Problem Scale, both groups of participants reported significantly fewer child behaviour problems at both time points, but the differences between

the groups were not statistically significant at either time point. Parents also reported less frequency of difficult behaviours on the ECBI Intensity Scale, but, again, there was no significant difference between the groups at either time point.

The results from the observational assessments showed that both groups demonstrated fewer positive parent behaviours at both follow-up time points than they had used at baseline, but the decline was significantly less in the intervention group. In other words, the intervention group was significantly more positive in their parenting than the control group, at both time points. Parents in both groups also used fewer negative parenting strategies at both follow-up time points, but the intervention group used significantly fewer than control group parents at the one-year follow-up.

Children's observed positive behaviour also declined in both groups, but children with parents in the intervention group were interacting with their parents significantly more positively at the one-year follow-up than children whose parents were not receiving the programme. There were no differences between the groups in terms of children's negative behaviour at post-test or one-year follow-up. Here, it is necessary to note that negative behaviour was seldom observed in the children in either group in these assessments.

Results from the per protocol analysis are presented alongside the intention-to-treat results in **Table 7**. Although the results are similar, the group of high attenders reported more favourable results at the post-test than the full intervention group included in the intention-to-treat analysis. Unlike in the intention-to-treat, there was a significant difference between the high attenders and the control group at post-test, with the former reporting a lower frequency of problematic child behaviour according to the ECBI Intensity Scale. High attenders, when compared to the full intervention group, also reported fewer problems on the ECBI Problem Scale. The pattern of responses was similar for the other variables except for observed positive child behaviour. Children of parents in the high attender group behaved significantly

more positively than control group children at both the immediate post-test and one-year follow-up, in the observed tasks.

Table 7

Results of Intention-to-treat and Per Protocol Analysis

	Intention-to-treat		Per protocol	
	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Positive parenting (Frequency)				
Post-test to baseline (control)	1.03 [0.99, 1.07]	.17	1.02 [0.98, 1.06]	.41
One-year follow-up to baseline (control)	1.10 [1.06, 1.15]	<.01	1.09 [1.05, 1.14]	<.01
Post-test to baseline (intervention)	1.13 [1.09, 1.18]	<.01	1.18 [1.13, 1.23]	<.01
One-year follow-up to baseline (intervention)	1.10 [1.06, 1.14]	<.01	1.09 [1.04, 1.14]	<.01
Post-test to baseline (intervention vs control)	1.10 [1.06, 1.15]	<.01	1.16 [1.10, 1.22]	<.01
One-year follow-up to baseline (intervention vs control)	0.99 [0.95, 1.04]	.74	0.99 [0.94, 1.05]	.77
Positive parenting (Problem)				
Post-test to baseline (control)	0.78 [0.65, 0.93]	.01	0.77 [0.63, 0.94]	.01
One-year follow-up to baseline (control)	0.52 [0.43, 0.63]	<.01	0.52 [0.42, 0.64]	<.01
Post-test to baseline (intervention)	0.71 [0.59, 0.85]	<.01	0.44 [0.34, 0.58]	<.01
One-year follow-up to baseline (intervention)	0.60 [0.50, 0.73]	<.01	0.64 [0.50, 0.83]	<.01
Post-test to baseline (intervention vs control)	0.91 [0.74, 1.13]	.40	0.57 [0.43, 0.75]	<.01
One-year follow-up to baseline (intervention vs control)	1.12 [0.90, 1.41]	.32	1.23 [0.93, 1.62]	.15
Child behaviour (Intensity)				
Post-test to baseline (control)	0.82 [0.78, 0.85]	<.01	0.81 [0.78, 0.85]	<.01
One-year follow-up to baseline (control)	0.73 [0.70, 0.77]	<.01	0.73 [0.70, 0.77]	<.01
Post-test to baseline (intervention)	0.78 [0.75, 0.82]	<.01	0.76 [0.72, 0.80]	<.01
One-year follow-up to baseline (intervention)	0.71 [0.68, 0.74]	<.01	0.69 [0.65, 0.74]	<.01

Table 7 (Continued)

Results of Intention-to-treat and Per Protocol Analysis

	Intention-to-treat		Per protocol	
	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Child behaviour (Problem)				
Post-test to baseline (control)	0.73 [0.66, 0.81]	<.01	0.72 [0.66, 0.80]	<.01
One-year follow-up to baseline (control)	0.64 [0.57, 0.71]	<.01	0.63 [0.57, 0.71]	<.01
Post-test to baseline (intervention)	0.75 [0.68, 0.83]	<.01	0.62 [0.53, 0.71]	<.01
One-year follow-up to baseline (intervention)	0.67 [0.60, 0.75]	<.01	0.61 [0.53, 0.71]	<.01
Post-test to baseline (intervention vs control)	1.02 [0.90, 1.16]	.77	0.85 [0.72, 1.00]	.05
One-year follow-up to baseline (intervention vs control)	1.04 [0.90, 1.20]	.59	0.97 [0.81, 1.15]	.69
Non-Violent discipline				
Post-test to baseline (control)	0.81 [0.74, 0.88]	<.01	0.80 [0.73, 0.87]	<.01
One-year follow-up to baseline (control)	0.66 [0.60, 0.72]	<.01	0.65 [0.59, 0.72]	<.01
Post-test to baseline (intervention)	0.84 [0.77, 0.91]	<.01	0.84 [0.75, 0.94]	.002
One-year follow-up to baseline (intervention)	0.76 [0.69, 0.83]	<.01	0.74 [0.66, 0.83]	<.01
Post-test to baseline (intervention vs control)	1.04 [0.94, 1.15]	.49	1.03 [0.92, 1.17]	.59
One-year follow-up to baseline (intervention vs control)	1.15 [1.03, 1.29]	.01	1.14 [1.00, 1.29]	.05
Physical punishment				
Post-test to baseline (control)	0.59 [0.50, 0.70]	<.01	0.59 [0.49, 0.70]	<.01
One-year follow-up to baseline (control)	0.32 [0.26, 0.39]	<.01	0.32 [0.26, 0.39]	<.01
Post-test to baseline (intervention)	0.40 [0.33, 0.48]	<.01	0.34 [0.27, 0.45]	<.01
One-year follow-up to baseline (intervention)	0.30 [0.25, 0.37]	<.01	0.26 [0.20, 0.35]	<.01
Post-test to baseline (intervention vs control)	0.68 [0.54, 0.85]	<.01	0.59 [0.45, 0.77]	<.01
One-year follow-up to baseline (intervention vs control)	0.95 [0.74, 1.23]	.71	0.83 [0.60, 1.14]	.25

Table 7 (Continued)

Results of Intention-to-treat and Per Protocol Analysis

	Intention-to-treat		Per protocol	
	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Emotional punishment				
Post-test to baseline (control)	0.53 [0.47, 0.61]	<.01	0.54 [0.47, 0.62]	<.01
One-year follow-up to baseline (control)	0.34 [0.29, 0.40]	<.01	0.35 [0.29, 0.41]	<.01
Post-test to baseline (intervention)	0.45 [0.39, 0.52]	<.01	0.42 [0.35, 0.51]	<.01
One-year follow-up to baseline (intervention)	0.35 [0.30, 0.41]	<.01	0.33 [0.27, 0.41]	<.01
Post-test to baseline (intervention vs control)	0.84 [0.72, 1.00]	.04	0.78 [0.63, 0.96]	.02
One-year follow-up to baseline (intervention vs control)	1.03 [0.85, 1.24]	.79	0.94 [0.74, 1.19]	.60
Positive parent (observed)				
Post-test to baseline (control)	0.67 [0.62, 0.73]	<.01	0.66 [0.61, 0.73]	<.01
One-year follow-up to baseline (control)	0.45 [0.40, 0.50]	<.01	0.44 [0.39, 0.50]	<.01
Post-test to baseline (intervention)	0.90 [0.84, 0.97]	<.01	0.96 [0.88, 1.04]	.28
One-year follow-up to baseline (intervention)	0.58 [0.54, 0.63]	<.01	0.71 [0.64, 0.78]	<.01
Post-test to baseline (intervention vs control)	1.32 [1.20, 1.45]	<.01	1.44 [1.30, 1.59]	<.01
One-year follow-up to baseline (intervention vs control)	1.20 [1.09, 1.33]	<.01	1.35 [1.14, 1.59]	<.01
Negative parent (observed)				
Post-test to baseline (control)	0.82 [0.72, 0.94]	<.01	0.82 [0.71, 0.95]	.01
One-year follow-up to baseline (control)	0.66 [0.57, 0.76]	<.01	0.66 [0.57, 0.77]	<.01
Post-test to baseline (intervention)	0.80 [0.70, 0.90]	<.01	0.83 [0.70, 0.98]	.03
One-year follow-up to baseline (intervention)	0.51 [0.42, 0.60]	<.01	0.55 [0.43, 0.70]	<.01
Post-test to baseline (intervention vs control)	0.97 [0.83, 1.13]	.68	1.01 [0.84, 1.21]	.93
One-year follow-up to baseline (intervention vs control)	0.75 [0.60, 0.94]	.01	0.83 [0.63, 1.09]	.18

Table 7 (Continued)

Results of Intention-to-treat and Per Protocol Analysis

	Intention-to-treat		Per protocol	
	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Positive child (observed)				
Post-test to baseline (control)	0.86 [0.81, 0.90]	<.01	0.84 [0.80, 0.89]	<.01
One-year follow-up to baseline (control)	0.54 [0.50, 0.59]	<.01	0.53 [0.49, 0.58]	<.01
Post-test to baseline (intervention)	0.91 [0.85, 0.97]	<.01	1.06 [0.98, 1.14]	.14
One-year follow-up to baseline (intervention)	0.62 [0.55, 0.69]	<.01	0.59 [0.52, 0.67]	<.01
Post-test to baseline (intervention vs control)	1.06 [0.97, 1.17]	.18	1.26 [1.15, 1.39]	<.01
One-year follow-up to baseline (intervention vs control)	1.13 [1.04, 1.22]	<.01	1.11 [1.02, 1.21]	.02
Negative child (observed)				
Post-test to baseline (control)	0.79 [0.67, 0.93]	.01	0.75 [0.63, 0.88]	<.01
One-year follow-up to baseline (control)	0.27 [0.21, 0.35]	<.01	0.26 [0.20, 0.33]	<.01
Post-test to baseline (intervention)	0.78 [0.66, 0.92]	<.01	0.68 [0.55, 0.83]	<.01
One-year follow-up to baseline (intervention)	0.29 [0.23, 0.37]	<.01	0.27 [0.20, 0.37]	<.01
Post-test to baseline (intervention vs control)	0.99 [0.81, 1.22]	.93	0.91 [0.72, 1.15]	.42
One-year follow-up to baseline (intervention vs control)	1.07 [0.76, 1.51]	.69	1.07 [0.73, 1.58]	.73

Ethical considerations.

Formal ethics approval. Ethics approval for the RCT was obtained from the University of Cape Town Department of Psychology Research Ethics Committee (reference code: 2012_12_01) and the University of Oxford Central University Research Ethics Committee (reference code: SSD/CUREC2/11-40). Copies of the approval letters from both institutions are included in Appendix E. The RCT is registered at ClinicalTrials.gov (NCT01802294), the Pan African Clinical Trial Registry (PACTR201302000455414), and the Violence Prevention Trials Register (http://www.preventviolence.info/Trials?ID=1).

Measures to protect autonomy. The research team made all possible attempts to ensure that participants fully understood the research and that consent was both voluntary and informed. All caregivers that agreed to participate in the RCT were required to sign a consent form (see Appendix F). By signing this form, participants also gave the team permission to film their children during observational assessments. We did not obtain assent from children as they were very young. All fieldwork and programme staff signed confidentiality agreements after being trained in the importance of protecting participants' personal information.

Research assistants read out the information sheets (see Appendix G) and consent forms, which were available in both English and isiXhosa, to participants in their preferred language to prevent low literacy from limiting their understanding of the study's purpose and methods. They explained to participants that they had the right to decline to participate or terminate their involvement in the RCT at any time and that their information would remain confidential. They also encouraged participants to ask any questions that they may have had about the study.

Incentives. Providing monetary incentives for participation in research studies is controversial. Some authors have expressed concerns that they may be coercive, and so

compromise voluntary participation, and also lead participants to hide information that may deem them ineligible for participation (Bentley & Thacker, 2004; Head, 2009; Steiner, 2006). However, they may also serve as a sign of respect for participants' time and involvement, and are commonly distributed during evaluations of behavioural interventions (e.g., Cluver et al., 2016; Daniels et al., 2012).

In the RCT, participants received incentives in the form of supermarket vouchers at baseline (R20; ≈ USD 1.5 – enough to buy two kilograms of rice), post-test (R30; ≈ USD 2.2 – enough to buy two kilograms of samp and beans), and one-year follow-up (R50; ≈ USD 3.7 – enough to buy a large jar of peanut butter). Additionally, child participants received a toy to the value of R5 (≈ USD 0.4) at each research visit – examples of these toys included a simple doctor's set, bouncy ball, a handheld water game. At the one-year follow-up visit, all caregivers received a certificate for their involvement in the RCT (Appendix D). Participants were made aware of all of the incentive amounts at the screening visit. At the time of recruitment, the research team did not feel that these incentives, although attractive, would cause undue influence on participants' decision to participate in the study. Also, field staff commented on how providing incentives aligned with the principle of reciprocity, which is central to African culture (Nussbaum, 2003).

Intervention group participants received no monetary incentives for attending programme sessions. However, they received snacks at the programme as well as a hot meal and a set transport reimbursement (even if they had walked to the venue) after each session. Those who attended six or more of the twelve sessions received a certificate to acknowledge their participation in the programme (Appendix H).

Measures to reduce potential harm. This study did not involve any procedures likely to cause any unpleasant or harmful side effects. However, the team took steps to reduce any risk of negative experiences for parents as a result of the study. All research assistants and

facilitators were trained and experienced in both research ethics and in working with vulnerable families. If one of the participants they visited was in need of accessing more extensive support, they would report it to me and we would complete a referral form together. Forms were reviewed immediately by one of the principal investigators and delivered to appropriate NGOs and authorities. The same process was followed when any possible referrals (e.g., for child maltreatment) were detected during both the quantitative and qualitative data checking process.

Measures to protect confidentiality. Documents and data that needed to be securely stored included consent forms, electronic surveys, observational assessment videos, and datasets. Signed consent forms were stored in a locked cupboard in the office of one of the principal investigators at the Department of Psychology at the University of Cape Town.

Provided that mobile phones had sufficient data credits and network signal, surveys would be uploaded to the Mobenzi Researcher online platform immediately after research assistants selected the "submit" option on the dashboard. I ensured that research assistants always had sufficient data to prevent surveys remaining on phones for longer than needed – and therefore preventing risks to confidentiality. A project intern or I would download surveys from the Mobenzi Researcher platform daily and save them to two different password-protected hard drives as well as to a password-protected shared drive on the cloud, which only the academic research team could access.

Observational assessment videos were collected from research assistants' phones at least twice per week and were then burned to DVD and backed up on password-protected hard drives. These videos were not stored on the cloud as they were too large. Process data forms were stored with the consent forms in the locked cupboard in the principal investigator's office. The final merged dataset, which includes self-report, observational, and process data, is stored on two password-protected hard drives as well as on the cloud. All

participant names were omitted from the dataset and replaced with research identification numbers.

This chapter has sketched out both the development and piloting of the SCFP as well as the larger RCT of the programme. It provides a solid basis for the subsequent chapters, which focus on parental engagement in this intervention during its evaluation. The next chapter will describe the research questions, and the associated design, which are investigated in this thesis.

Chapter 4: Research Questions and Design

Since an explanation of the SCFP and its evaluation via RCT have now been detailed, this chapter presents the research questions that form the basis of this thesis as well as the research design used to investigate them. Before these are discussed, the term "engagement", as it is used in this thesis, is defined.

Defining Engagement

As discussed in the literature review, engagement is defined as a process that includes enrolment, attendance, and quality of participation – these components are often spoken about individually in this thesis, but sometimes the collective term "engagement" is used. Enrolment refers to whether a participant allocated to the intervention group attended at least one programme session, while attendance refers to the amount or dosage of the programme received by an enrolled participant (Baker et al., 2011; Chacko et al., 2016; Dumas et al., 2007). Quality of participation can include a number of different components, including participants' level of discussion during sessions, whether they arrived on time, and whether they completed their home practice tasks (Dumas et al., 2007; Nix et al., 2009). For this study, the extent to which parents practice their weekly homework tasks has been used as an indicator of this variable. Initially, weekly facilitator report of participants' quality of participation was to be used, however, there was too little variation in these scores. The specific measures used to capture engagement variables will be discussed in Chapter 6, which presents the quantitative models that explore the predictors of engagement.

Research Questions

Qualitative and quantitative methods were used to generate an understanding of parental engagement in the SCFP during the RCT of the intervention. Qualitative methods were first used to gain insight into the barriers and facilitators faced by parents regarding

engaging in the intervention. This part of the thesis sought to answer the following research question:

- *What did participants, who were allocated to receive the SCFP as part of the RCT, identify as barriers to and facilitators of enrolling in and attending the intervention?*

Qualitative findings, the international literature, and ideas of what may be relevant in the South African context, then informed both the development and interpretation of "engagement models" – i.e., quantitative models to explore the predictors of SCFP enrolment, attendance, and level of home practice completion. These models sought to answer the following questions:

- *Which baseline variables predicted parental enrolment in the SCFP among participants allocated to the intervention group?*
- *Which baseline variables predicted attendance at the SCFP among those participants who enrolled in the intervention?*
- *Which baseline variables predicted the level of home practice completion during the SCFP among enrolled participants who submitted home practice forms?*

Since these questions provide an understanding of variables associated with engagement, the final component then quantitatively sought to investigate how engagement (using only attendance) was related to treatment response to the SCFP over time – i.e., whether there were there dose-effect relationships? Specifically, it sought to answer the following research question:

- *What is the relationship between attendance at SCFP sessions and outcomes from the programme over time?*

This question is critical since a programme's aim is to improve outcomes for parents and children, so if attendance is not associated with improvements, then this signals that either the

programme content or its process (for instance, how facilitators work to engage parents) may need adjustment.

Additional process data collected during the delivery of the SCFP, such as participants' level of overall programme satisfaction, their sense of understanding and confidence in implementing new skills after each session, and facilitator ratings of participants' quality of participation, was used to gain further insight into their engagement in the programme.

Research Design

In terms of research design, this study is therefore a series of interconnected parts. The first part, which includes the qualitative interviews and engagement models, used a mixed-methods approach (Creswell, Klassen, Plano Clark, & Smith, 2011). The combination of both qualitative and quantitative data enabled a greater understanding of engagement. While the quantitative component generated results on predictors of engagement based on self-report data, the qualitative component enabled valuable insights into participants' lived experiences, and shed light on the personal, programmatic, and contextual factors that acted as barriers and facilitators to engaging in the SCFP. Stand-alone post-hoc analyses of quantitative baseline data would provide limited detail on participants' everyday realities (Gross et al., 2001), which is particularly important in a context that has not yet been studied.

This part of the study uses a convergent parallel or triangulation approach, which is a concurrent mixed-methods design (Creswell, 2013). This approach involves collecting the two types of data separately and then integrating findings to compare, interrelate or validate them (Plano Clark, Huddleston-Casas, Churchill, Green, & Garrett, 2008). The one difference is that the qualitative findings in this study shaped the selection of predictors included in the engagement models - this strategy aligns with mixed-methods sequential designs. However, it is not a true sequential explanatory design, where qualitative data would have been collected and analysed before quantitative data collection and analysis. In

this study, the qualitative findings did not give rise to the development of a quantitative measure and only informed analysis.

Following from this section, dose-effect is explored using quantitative methods. This part of the study was important to the overall conception of the research because it extends the investigation from only looking at predictors of engagement to understanding how the process relates to programme outcomes. A quantitative approach is most suitable for this type of exploration as it seeks to quantify the relationship between variables – i.e., determine the change over time in dependent variables (i.e., positive parenting or child behaviour) when there is a change in an independent variable (i.e., attendance).

This chapter has presented the research questions and design that will shape the remainder of this thesis. Chapter 5, which follows, presents the methods used in the qualitative component of the study as well as the generated findings.

Chapter 5: Barriers to and Facilitators of Engagement - Methods and Findings

This chapter presents the qualitative component of this study. First, it outlines the methods used, focusing specifically on ethical considerations, sample selection, measures, procedure, reflexivity, and analysis techniques. It then presents the generated findings.

Ethical Considerations

The qualitative component of this study was conceptualised after the original ethics approval for the RCT had been granted. Therefore, ethical approval for the individual interviews was sought as an amendment to this application. The Universities of Cape Town and Oxford, as well as the RCT's Trial Steering Committee, approved this additional study component (Appendix I for relevant letters from the relevant ethics committees). The proposed doctoral work, as a whole, was also presented to the University of Cape Town Department of Psychology's thesis committee and was granted approval (see Appendix J for approval letter).

Since the interviews were not included in the initial consent form, consent to be interviewed was obtained additionally from participants (see Appendix K for the consent form). The research assistant followed the same informed consent procedures as had been followed by the other research assistants who collected survey and observational data. She explained to participants that their participation in the interview would not influence their involvement in the broader RCT. Participants were given a R30 (≈ USD 2.2) supermarket voucher and light refreshments to thank them for their time, in line with practices in the trial. This incentive was not considered substantial enough to be coercive.

The research assistant understood confidentiality, and signed a confidentiality statement. Data, both in its raw and transcribed form, was burned to DVDs as well as stored on a password-protected platform on the cloud. All identifying information was removed, and participants were identified using their unique participant ID.

Sample

Purposive sampling, a type of non-probability sampling, was used to recruit 32 intervention group participants to be interviewed. Since it was not possible to interview the full intervention group, this sampling technique was most appropriate as it enabled the selection of key participants of interest who could share multiple perspectives on the barriers and facilitators to engaging in the SCFP (Patton, 2005). This subset of interest included participants who did not enrol in the programme (n = 7), as well as those that had low (attended 1 to 5 sessions; n = 10) or high attendance rates (attended 8 to 12 sessions; n = 15). The sample was initially going to include ten participants from each subgroup, but some of the non-enrolees could not be located even after multiple attempts at contacting them. Also, the definition of a "high attender" is different from the one used in the per protocol analysis, which classified them as having attended seven or more sessions. Despite the different cut-offs, the same number of participants (n = 77) fall in to these categories.

To determine whether there were significant differences in baseline scores between interviewed and non-interviewed participants, independent samples t-tests and Mann-Whitney U tests for continuous variables and Chi-squared tests and Fisher's exact tests for categorical variables were conducted (Field, 2009). There were significant differences between interviewed and non-interviewed parents on the PARYC problem scale (U = 1265; p = .02) and the BDI-II (U = 1297; p = .01) (see **Table 8** below). These results indicate that interviewed parents had fewer problems with positive parenting strategies and were less depressed than non-interviewed parents.

Table 8

Baseline Characteristics of Intervention Group Participants

Characteristic	Total (N = 148)	Interviewed (n = 32)	Not Interviewed (n = 116)
Parental age (years), *M* (*SD*)	33.61 (9.27)	31.81 (8.56)	34.11 (9.48)
Relationship to target child (% biological parent)	83%	84%	83%
Completed high school (% yes)[a]	18%	13%	20%
Marital status (% single)	69%	66%	70%
Unemployed (%)	88%	88%	88%
Parental alcohol misuse (% yes)	33%	44%	30%
No. of health conditions, *M* (*SD*)	0.92 (0.95)	0.75 (0.84)	0.97 (0.98)
Experience of IPV (% yes)	35%	25%	37%
Parenting stress, *M* (*SD*)	114.59 (19.33)	119.97 (15.18)	113.04 (20.16)
Parental depression, *M* (*SD*)*	15.74 (10.90)	12.38 (1.96)	16.73 (1.03)
Social support *M* (*SD*)	21.03 (5.98)	20.31 (4.44)	21.23 (6.34)
Positive parenting (Frequency) *M* (*SD*)	42.80 (9.33)	44.75 (7.91)	42.27 (9.64)
Positive parenting (Problem)* *M* (*SD*)	4.28 (3.31)	2.94 (2.47)	4.67 (3.42)
Physical punishment use *M* (*SD*)	3.79 (3.42)	3.53 (3.07)	3.86 (3.52)
Nonviolent discipline use *M* (*SD*)	5.95 (3.84)	5.78 (2.54)	6.00 (3.71)
Emotional punishment use *M* (*SD*)	6.31 (4.38)	5.88 (4.38)	6.43 (4.39)
Child age (years), *M* (*SD*)	5.26 (2.06)	4.84 (2.19)	5.37 (2.02)
Child sex (% male)	53%	50%	54%
Child behaviour problems (Intensity), *M* (*SD*)	141.21 (22.85)	133.94 (21.73)	143.22 (22.84)
Child behaviour problems (Problem), *M* (*SD*)	24.61 (5.07)	23.06 (4.72)	25.03 (5.06)
Household hunger level	5.26 (2.72)	5.22 (2.79)	6.00 (3.71)
Household employment (% someone employed in household)	62%	62%	62%

[a] Only one participant in the intervention group had completed any form of post-matric qualification.
*p < .05 when testing for differences between those who were interviewed and those who were not.

Measures

Interview schedules with open-ended questions were used to guide the individual interviews. These types of questions are ideal for exploratory research as they enable diverse participant perspectives to emerge and to be expressed in their own terms, which allows for deeper exploration of individuals' views through probing (Babbie, Mouton, Vorster, & Prozesky, 2001). To explore barriers and facilitators at different levels of engagement, there was an interview schedule for participants who did not enrol in the programme (Appendix L), those who attended five or fewer sessions (Appendix M), and those who attended eight or more sessions (see Appendix N). If parents appeared to be somewhat resistant to talking about their own experiences, the research assistant asked them to reflect on what they thought was the case for other parents who were invited to attend the SCFP. The rationale for this approach was to create a space that was less threatening to parents.

The schedules drew from the literature on engagement, and included probes relating to personal and family barriers and facilitators, the relevance of the intervention, intervention dynamics, and time and scheduling demands. They also included a question on participants' experience of the research visits to gauge whether the research component potentially acted as a barrier or facilitator to enrolling in the SCFP – because of, for example, the quality of interaction between the research assistant and participant.

Interview schedules were translated into isiXhosa and back-translated into English to check translation accuracy. Each schedule was pilot-tested with one participant, and, since questions were interpreted as intended and detailed data emerged from these interviews, they were left unchanged. The research assistant, who conducted all of the interviews, was familiar with qualitative research methods and had experience of working with vulnerable families. She received additional training from me on interviewing techniques as well as on

the three schedules individually. In order to reduce social desirability response bias, she was not involved in any of the data collection or programme implementation during the RCT.

I was present for all interviews, and, since I have a fairly good understanding of isiXhosa, was typically able to probe where necessary. Unfortunately, my knowledge of the language was not good enough to conduct the whole interview myself. I was unlikely to have been known by the participants as I did not deal with them personally during data collection and programme implementation.

Procedure

The research assistant conducted the interviews in isiXhosa between the RCT's post-test and one-year follow-up assessments. Interviews were conducted either at a community venue, the participant's home or in my car. If a participant could not be reached telephonically, I drove to their home with a security escort and the research assistant, and the interview was then conducted in a private room or in my vehicle. Using my vehicle was appropriate when there was no private space in the participant's home or when there were safety concerns (e.g., if they lived in an unserviced informal settlement far from the road). In these cases, the security escort left the vehicle before the interview started to ensure privacy.

The research assistant obtained informed consent from all participants before beginning interviews. Interviews typically ran for 30 minutes and ended with light refreshments. Participants were given a R30 (≈ USD 2.2) grocery voucher to compensate them for their time and effort, and, if necessary, a transport reimbursement. Interviews were digitally recorded on two devices, with written notes taken as a backup. The research assistant transcribed the interviews and translated them into English. I checked the transcripts of the first three interviews for quality and provided the research assistant with feedback before she began transcribing and translating the other recordings. If any queries arose while reading the remaining transcripts, they were directed to her for clarification. If necessary, we referred

to the recordings to resolve uncertainties.

Reflexivity

Throughout the qualitative process, practicing reflexivity was essential. Reflexivity involves the researcher carefully considering how his or her own assumptions, beliefs and behaviours may impact the research process (Russell & Kelly, 2002). Although I was not the primary interviewer, I was still an active member of the interview process. Not only was I in the same physical space as the interviewer and participant, but, in some cases, I probed when necessary. I also analysed and interpreted the data. It was necessary for me to understand how being a white, middle-class female based at the University of Cape Town, a predominantly white research institution, may have influenced my perceptions as well as the participants' perceptions of me. Additionally, I had to consider that some of the participants may have seen me at the programme venues on some occasions, although I did not have personal communications with them, and so may have felt uncomfortable making negative comments about the intervention and the implementation thereof.

It was also important to consider the dynamic between the research assistant who conducted the interviews and the participants. The research assistant was a black postgraduate student also from the University of Cape Town, and so participants may have viewed her as coming from a more privileged background than themselves. Therefore, they may have felt more reserved talking about their daily struggles and reasons for their level of engagement in the SCFP than if they were speaking to someone from the same socio-economic background. Sparse responses to questions may have occurred because the participants felt intimidated, rather than relaxed and chatty.

Although the research assistant and I had much in common, in terms of attending the same university, being of a similar age, having a similar family background and so forth, we were aware that our racial and cultural backgrounds may affect the way that we each make

sense of the interview data. As a result, we would discuss each interview together in order to understand each other's perceptions of the data – this was especially useful as the research assistant could explain things from an isiXhosa cultural perspective.

Analysis

Template analysis, a form of thematic analysis, was used to analyse the generated data (King, 1998). This analysis technique allows themes within the data to be identified and analysed via coding (Braun & Clarke, 2006). Braun and Clarke (2006) explain that "[a] theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the dataset" (p.10). Template analysis offers a more flexible approach to coding data when compared to more prescriptive techniques, like grounded theory (Brooks & King, 2012), and so is well-suited to exploratory research. It also allows for comparisons across cases in addition to exploration of individual cases (Brooks & King, 2012), which is often needed to draw conclusions from data.

Template analysis involves creating a coding template, which organises the themes identified in the data in a useful and meaningful way (King, 1998). This approach encourages hierarchical coding, where there may be narrower codes (e.g., group dynamic, programme content) nested within a broader one (e.g. programme factors; King, 1999). The coding scheme for this study was developed based on a mixed deductive and inductive approach (Burla et al., 2008). While some codes were derived theoretically by identifying relevant themes from the literature, which we expected to be relevant to the analysis (i.e., those that formed the basis of the interview schedule), others were identified from the transcripts, providing the basis for creating new codes or adjusting those generated via induction (Burla et al., 2008). The analysis process, which is outlined in detail below, follows the steps identified by King (1998).

The first step in the process was to establish predefined codes from a review of the literature (See **Table 9**). These codes informed the interview schedule and became higher order codes in the template. After data collection, I then read through three interview transcripts, one from each sampling category, and linked segments of text to the predefined codes. New codes were added as themes emerged and predefined codes were sometimes deleted or recoded under more suitable headings. A second coder – also a postgraduate student in Psychology - reviewed my coding after having gone through the definitions of the codes. Any disagreements in our coding were discussed in person, and suggestions from the second coder were integrated into the template. The template was reviewed by my thesis supervisor as well as another academic highly experienced in qualitative research.

Table 9

A Priori Themes Identified in the Engagement Literature

Theme	Sub-themes
Barrier: Child behaviour problems	-
Barrier: Family factors	Divergent family values
Barrier: Personal factors	Lack of interest/motivation
	Lack of time/Scheduling
Barrier: Programme factors	Programme content
	Group leader characteristics
	Group dynamics
Barrier: Structural	Parental employment
	Location of programme venue/ Accessibility
	SES
Facilitator: Family factors	Family buy-in
Facilitator: Personal	Motivation/Readiness to change
	Schedule
Facilitator: Programme factors	Programme content
	Group leader characteristics
	Group dynamics
Facilitator: Structural	Location of programme venue
	Transport

I then coded the complete dataset, being aware of the need to expand the template if new themes and sub-themes emerged during the coding process. The second coder reviewed 12 (37.50%) of the coded transcripts. Having the scrutiny of a second coder increased scientific rigour by ensuring that I was not making assumptions about the data and its meaning (Burla et al., 2008; Carey, Morgan, & Oxtoby, 1996; Symon & Cassell, 2012). We discussed any differences in coding until consensus was reached. I then went through the transcripts one final time to make sure all text was appropriately coded according to the final template (see **Table 10** below). This template then provided a basis for my interpretation of

the dataset and writing up of findings. The last step in the analysis process was selecting data passages to illustrate the identified themes.

All coding was done using NVivo 10 for Mac (QSR, 2014), a computer programme for qualitative data analysis that allows efficient organisation of large amounts of textual data, review and code (and recode if necessary) data, search for specific text strings in the text and identify patterns in coding fairly easily (Bandara, 2006). Additionally, it enables all text passages assigned to specific codes to be viewed together on screen.

Table 10

Final Coding Template for Qualitative Analysis

Theme	Sub-themes
Barrier: Structural barriers	Low SES
	Participant employment
	Poor weather
	Location of programme venue
Barrier: Personal barriers	**Participant alcohol misuse**
	Participant health (including caring for sick family members)
	Lack of interest/motivation
Barrier: Programmatic barriers	Group dynamics
	Programme attrition
	Delivery format
Facilitator: Structural facilitators	Location of programme venue
	Timing of the programme
Facilitator: Personal facilitators	**Sense of commitment** and readiness to change
	Family buy-in
Facilitator: Programmatic facilitators	Programme content
	Group leader characteristics
	Group dynamics

Note. Codes in bold typeface indicate codes that were added after the initial template was developed.

Findings

Findings have been grouped according to structural, personal, and programmatic barriers and facilitators. Participants' opinions of the research experience and intervention recruitment strategies are also discussed.

Structural barriers.

Low SES. Low SES appeared to be the most significant structural barrier for participants. This barrier was clearly reflected in the transport difficulties that participants raised in the interviews. They often relied on public minibus taxis to get to and from the programme when the venue was not within walking distance. Parents were typically reimbursed R12 (≈ USD 1) to cover travel expenses as this was the standard return taxi fee for travel within most areas of Khayelitsha and Nyanga. If they lived further away from the programme venue, they were given a larger reimbursement to cover their costs (range: R13 (≈ USD 1) to R50 (≈ USD 3.74)). During the interviews, some participants commented that they did not have the money to get to the venue in the first place, to get the reimbursement. As one non-enrolee (Participant #21) said: "Sometimes I didn't have money or food... and I only have R10 (≈ USD 0.8) to buy my child bread ... and so I wasn't able to go." This same participant suggested that transport be arranged for future rounds of the programme. She stated that if this had happened, she would have attended "because [she is] free all of the time". Some participants would walk to the programme and use the transport money for other purposes, which may have been an incentive for attendance; but this was not an option for all parents due to safety concerns, health problems, and, in some cases, distance.

The effects of poverty also emerged strikingly when a parent described how a group member missed sessions because of hunger and having to plan how she was going to feed her children that day:

In our group, we had someone that doesn't get grant money and has three children.

> Even if she wants to go somewhere, she is hungry and has to stay around and plan food for the family. Those are some problems that she would experience that would prevent her from coming, even if she wanted to come. (Participant #279, low attender)

A non-enrolee also commented on how hunger could prevent someone from attending – it appears, though, that she was unaware that meals were provided as a programme incentive:

> It would be good to provide food, because some people say they can't attend when they are hungry. (Participant #309, non-enrolee)

This quote highlights the need for programme staff to inform participants about whether food is provided at the intervention.

Another barrier, which is likely related to SES, was a lack of childcare provision during programme implementation. The implementation team had decided not to provide childcare in order to make the intervention lower cost and hence more sustainable in real-world settings. However, many participants kept bringing their young children to the programme, and so a community member was employed to entertain the children in a separate room at the programme venues. Children who attended with their parents were also provided with a meal, which may have encouraged attendance. Although the introduction of childcare may have served as a facilitator for those already enrolled, non-enrolees may not have known about it.

A final barrier, also deeply connected to low SES (Peters et al., 2008), is challenges with accessing efficient healthcare services. A low attender (Participant #264) explained how she had to travel to the hospital, which was far from her home, twice per month to get her blood tested and collect her heart disease medication. Due to long hospital queues and a reliance on public transport, this process typically took her two full days, which often landed on the days that she was supposed to attend the programme. Two high attenders (Participant #91 & Participant #300) commented on how long waits at the clinic to receive medication or have a short consultation had affected the attendance of some of their group members with chronic illnesses.

Employment. Accessing employment or spending time looking for work was another structural barrier that contributed to participants not enrolling in the SCFP, dropping out and missing sessions. The programme was delivered on Saturday mornings in addition to weekday mornings in an attempt to cater to parents who worked regular working hours during weekdays. Evening sessions were not feasible due to high neighbourhood crime levels. However, working parents in the sample typically found shift work that had irregular hours. This unstructured schedule made it difficult for parents to commit to a set day and time each week for programme sessions:

> The reason I didn't go sometimes was because I would get piece jobs at times… so maybe I would get a piece job once a week. I used to go to the programme on Tuesdays and sometimes they would clash and, in that way, I would not be able to go. (Participant #201, high attender)

Additionally, parents commented that working hours tended to be very long, so they may have wanted to spend their spare time resting, doing household chores and running errands, rather than attending parent training:

> I got a job. I went [to the programme] twice or even three times... and the work I do, I start at 11am in the morning and come out at 10pm at night – there is no time for sessions. (Participant #368, low attender)

> The reason why I was not able to go to the sessions was because I work… I start working at 12 pm and close at 10 pm, so everyday I leave for work at 10 am. For me, I do not have the time… I only have time when I am off, which is Monday - it is my only off day. (Participant 130, non-enrolee)

The final quote above came from a parent who had selected Monday as her only available day for the programme. However, we were not able to offer the programme on Mondays, as the time was required for facilitator supervision - fortunately, this was the only participant who had indicated that she was only available on Mondays.

Several unemployed participants also mentioned that they did not always have time to attend the programme because of household errands. Living in poverty can make day-to-day errands lengthy – for example, walking to the grocery store instead of driving, hand-washing

a large family's laundry instead of putting it in the washing machine, or having to look after multiple children rather than enrolling them into a daycare centre.

Poor weather. Participants in Wave 1 commented that bad weather was a barrier to attendance. This group of participants received the SCFP during the winter months in Cape Town, which are typically marked by cold weather and heavy rain. Winter conditions made it difficult for them to walk to the programme or to the taxi rank to catch transport to get there:

> When it was raining, it was quite a distance to get there. (Participant #181, high attender)

> And sometimes you find the weather is bad, and I used to travel with her [pointing at her baby] and she was very young at that time… but she is older now, and if the weather would be bad now, I would tell myself that I must attend. (Participant #91, high attender)

Considering the poor living conditions of many participants, cold and wet mornings may also have made it more challenging for them to get out of their warm beds to attend the programme. A high attender (Participant #71) suggested that programmes be implemented only in the summer months:

> I would think that the problem was the weather, and so people are lazy to wake up and the sessions are very early in the morning. If they would change the time so that it isn't too early… Maybe if they would make it start at 12pm, people would be wide-awake at that time. Otherwise, I would suggest having the programme in summer.

No participants from Wave 2, which was implemented during the hot but dry summer months, mentioned the weather as a barrier to attendance.

Location of programme venue. One participant raised a community dynamic that is important to consider for future implementation, and may well have been a barrier to enrolment and attendance for some participants. She explained how "locations", another word for townships or peri-urban shanty towns, are divided into different suburbs and sometimes residents from one suburb are not particularly welcome in another suburb. It may

be best to deliver programmes in "neutral" spaces, such as community halls, rather than in crèches or smaller community venues located in residential areas.

> Since we are in a location, there is that thing that people at Site D do not enter Site B. If you were to go to a community hall where a lot of people could come… because there are a lot of people that actually want to attend the programme. (Participant #368, low attender)

Personal Barriers.

Parental alcohol misuse. Participants' misuse of alcohol appeared to be a significant barrier to programme attendance, especially for Wave 2 participants – this aligns with baseline data which indicates that a greater number of intervention group participants from Nyanga drank three or more drinks in one day in the past month (39.20% in Nyanga vs 26.10% in Site C). There are high levels of problematic drinking in South Africa, with individuals from lower socio-economic backgrounds, such as from the targeted communities, at significantly greater risk for alcohol problems (Parry et al., 2005). Here, one can see how the structural barrier of SES impacts personal factors too.

Participants mentioned how "people drink all the time" (Participant #202, low attender) and that they "always make some reason why they think they should drink" (Participant #71, high attender). Many spoke, either directly or indirectly, about how parents often prioritise drinking over other activities, such as childrearing:

> Alcohol is a priority in this community. I say so because I also drink. People here prioritise alcohol above taking care of themselves or their family. (Participant #202, low attender)

One non-enrolee (Participant #309) stated that the day that she was supposed to go to the programme was "the day that we drink alcohol - that's why people did not come". It is interesting that scheduling was a challenge for this participant since she selected the day that was most convenient for her to attend. Additionally, she could have switched session days before or at the beginning of the programme if she thought another day was more suitable. A

low attender (Participant #115) commented that the effects of her drinking habits prevented her attending the programme:

> I chose the Saturday session… then I used to say I can't go because I would be hungover.

Three participants reflected on how heavy drinking was a barrier for other participants' attendance and did not refer to themselves per se:

> Sometimes people wake up on the day they have the programme and decide to go and drink and get drunk instead… they are not going to be able to go. (Participant #368, low attender)

> And some people tell themselves that they are drunk and they won't bother going. (Participant #201, high attender)

> A lot of people in my group drink, they would never come… (Participant #250, high attender)

Participants found problematic drinking to be worse in their community during month-end and when social grants were issued – this may be because people have more readily available funds at these times with which to purchase alcohol.

> A lot of the time, in the area that I live in, parents are not serious. All they care about is alcohol. They drink a lot of alcohol in this area, especially during the month end… you will only find a few of them that are available. (Participant #264, low attender)

> Even the ones who get paid are going to think they can't go to the programme because they have money today, so they must go drink. (Participant #201, high attender)

A high attender (Participant #250) spoke about how parents from her community were involved in another social intervention, which provided free groceries after certain sessions. She described how the people who drank would only attend those sessions that had free groceries, and would skip the other sessions to go drinking instead. She added that "even at Sinovuyo they used to go drunk or not go at all". Another high attender (Participant #344) also commented that some parents went to the programme drunk and said that they were "not able to do things like the other people" during the session.

Health problems. Participants identified health issues as a barrier to programme engagement. These issues included participants being physically or mentally unwell, needing to collect their medication from the clinic, or having to care for sick family members.

Two participants stated that physical health problems prevented them from enrolling in the SCFP. One non-enrolee (Participant #21) became ill before the programme started and "didn't have strength to make it there". Another non-enrolee (Participant #13), who suffered from severe asthma, arrived at the programme, but the facilitators told her to go home to rest since she was out of breath. Unfortunately, according to facilitator reports, these participants did not receive session content via home visits as facilitators could not reach them after the session.

Another participant (Participant #60, low attender) dropped out of the SCFP as she had a difficult pregnancy and so needed to rest at home. Despite only having completed three sessions, she said that "Sinovuyo has made a very big difference to [her]". She talked about how the facilitators would check on her via mobile phone, and would encourage her to join the group again after the birth of her child. Due to her poor postnatal health, she was unable to rejoin the group.

A low attender (Participant #135) said that she missed sessions because "[she] was sick because it was winter and [she] had the flu". Two low attenders (Participant #202 & Participant #236), who both described themselves as drinkers, experienced mental health problems that limited attendance. One of these participants appeared to experience a severe short-term memory problem and would forget to attend sessions. She said: "I forgot her name now, but she would remind me by phone and say, "Do not forget tomorrow."… but if she didn't remind me, then I would forget".

The other participant also appeared to be suffering from a serious mental heath problem. It was difficult for the facilitators to engage with her because her condition made

her fear others, and her family did not want her to be around others if she was experiencing an episode. This participant had to be admitted to hospital during the SCFP:

> I went to all my sessions until I become ill… and I became mentally ill, and I went to stay at a hospital… I was irritable towards the children and did not want children near me. Every time they would come to me, I felt like they are going to kill me.

At the time of her interview, she was receiving regular medication to manage her condition and appeared quite lucid and insightful (hence we have included her data here).

Three participants missed sessions due to having to care for sick relatives, which ties in with low SES. Participants from the targeted communities would be unlikely to afford hired help to care for sick family members. Also, a consideration is that low SES families are more likely to be affected by ill health (Adler & Ostrove, 1999).

> My reason for not attending the entire programme is that I live with my cousin who is not well, and some of my family members work, so I need to stay with her so that she isn't alone. She has epileptic fits, and so she needs someone to look after her, and I am forced to stay with her. (Participant #70, low attender)

Lack of interest or motivation. When reflecting on participants that did not enrol or missed multiple sessions, high attenders tended to describe them as having a lack of interest or readiness to change. They spoke about how some participants may not have fully understood, when agreeing to participate in the RCT, that they were committing to attending a 12-week programme if assigned to the intervention group. If this lack of understanding was the case, it may have been due to the way in which participants were recruited for the RCT – they were approached door-to-door by a research assistant who emphasised the broader trial, rather than focusing on the programme. This strategy was used to avoid disappointing those parents who would be allocated to the control group. Outside of a trial setting, recruiters would have promoted the programme more strongly, and so may have attracted participants who had a greater readiness to change and desire to attend the programme.

They talked about how some participants may not have felt that they needed support in their parenting, and so did not recognise the potential benefits of attending a parenting

programme. The language used by high attenders towards non-enrolees and low attenders often implied that they thought that these parents did not care about their children enough or that they were not committed parents:

> I can think that this is something that will help me, but some people will find it boring. They may not be interested like some other people - they may not even know what they want or need, and they may not understand the reason why you would even want to go. If you are not interested from the first session, then you will never go back there. (Participant #71, high attender)

> Some people do not take things seriously, and do not look at how it will help them in the long run. For example, in two years time this could come to help you… and other people just think the way they raise their children is correct, not knowing what new things they can learn there, and that can help to add to what you already know. Maybe that type of person is actually the one that needs some kind of help. (Participant #131, high attender)

> People are not the same... maybe someone saw this as a joke, but it helps some people, and that is why they stay at the sessions. It depends on the parent, and how much they care about their child. If you do care about your child, you will find a way to attend all of the sessions. (Participant #206, high attender)

> I was the youngest one there and the other youngsters did not want to attend the sessions. They would go outside and answer their phones, and another girl, who was in the same age group as me, I had to drag her to the programme because she had already started. (Participant #300, high attender)

One high attender expressed how some participants had multiple challenges in their lives, which made it difficult for them to attend and engage actively in the SCFP:

> People did not attend because they had problems all of the time. They would sometimes attend, but they would only come for the food... but they have problems. There are a lot of them that were in my group, but you cannot say anything. They just sit down and don't take in anything that they have been taught, because they arrive late and don't hand in the homework report. (Participant #363, high attender)

Participant #300, who was a high attender, commented on how some members of her group would avoid contact with the facilitator, going as far as to hide away from them when they were attempting to conduct home visits:

> Some of them do not know anything about Sinovuyo and how it can help you... or being lazy, because you don’t know what is going to happen at the programme. Some of them would panic when (facilitator) used to call them on the phone and she would

> even say that it is okay to be late. They would say that they would come, but they would be lying.
>
> (Facilitator) spoke to her and said that she could come on another day, but the lady said to me that she was lazy to attend the programme because she was not used to things like these.
>
> When [the facilitator] went to go fetch them, they would pretend like they were doing something or they would rather go next door to stay there… People in Khayelitsha would run away or hide in the corner and tell the children that they must not let them inside.

When reflecting on low enrolment and attendance rates, participants (almost exclusively high attenders) spoke about how parents will typically only attend interventions or community activities if there is some incentive provided. Here, it is important to note that participants enrolled in the RCT received supermarket vouchers and a food package (for the observational assessments) at each research visit, but did not receive these incentives at programme sessions. Although incentives were explained in the information sheet, participants may have had the expectation that vouchers, or some other form of compensation, would continue to be distributed at sessions too. For some participants, realising that this was not the case, may have affected their engagement with the programme.

> The way I know it is that people always go for something if they are going to get money or groceries. (Participant #204, low attender)
>
> As the youth, we like gossiping a lot in the corners. We advise each other, but in ways that do not build us up. Maybe someone says that you shouldn't go to the sessions because you will be wasting your time, just for R12, and then come back with empty hands and you have no money. A lot of people do these things because they want rewards and, even if you gain knowledge from the sessions, it is worth nothing to them. They want material things - maybe money or a voucher - then that is the only time that they will attend the sessions. I do not know about other barriers, but they do not go to places that do not pay. (Participant #201, high attender)
>
> So most people that did not work… after some time they thought that they would get something. Let me make an example about (research assistant), she would come and leave bread and polony. Then it is nice in our house at that time - at least you know your child can have something to take to school. So most of the time people wanted such things from the programme. (Participant #279, low attender)

This participant, much like the participant above, had hoped that the programme would have provided food supplies that she could have taken home to share with her children:

> They do feed you over there, but what about the children who are left behind? When you leave and say that you are going somewhere, the children are waiting for you to come back with something, so I think that is one of the main reasons that makes them drop out... Because, yes, you will gain knowledge there, but when you leave with your bag and you have books inside it, they think that you at least have something inside for them… but you do not have anything. Those are some of the things that make people unwilling to attend the programme. (Participant #210, high attender)

Another high attender had commented on how some of her group members were disappointed that they only received a mug at the end of the programme. This mug, which was filled with chocolates, was a prize for high attenders.

> People complained that they attended the whole year, and they just received a coffee mug, because those ladies had promised us that we would get things, so they were complaining that they attended the whole year and stopped their everyday activities just to receive that. (Participant #250, high attender)

Despite the comments above, many of the high attenders spoke as if the intervention itself was an incentive in the form of new knowledge and skills. The participant below spoke about how some parents do not engage if they feel as though they are not getting something material from the programme. She felt that some participants do not consider that the gains from the programme may be significant, although intangible:

> People like going to places only if they are going to get something. They don't think about the information that they will get, which may help them even more. Others are negligent parents, and they don't care. They just want to be in a place where they will have fun all of the time. We come from different families, and some family members do not understand the programme. It also depends on how you explain things and if you are going to force it, because if you want something, you must go out and get it. (Participant #91, high attender)

Programmatic barriers. Three parents mentioned challenges with group dynamics, which were mainly due to parents feeling uncomfortable with sharing personal information with others. High attenders also noted that they felt disheartened when parents dropped out of the programme as this affected the trust developed in the group over multiple sessions.

> She went to the first workshop and I saw that she was very shy. When we would sit in a circle as a group and introduce ourselves, some people did not like that. To her, it was like we were playing around and it felt like she was wasting her time. (Participant #300, high attender)

> You would see that some of the group members were not as comfortable as others. When someone speaks about their problems, they would become tense. It is because you are scared to tell people your problems in case they go and tell others. (Participant #264, low attender)

Two low attenders commented on the SCFP's delivery format and stated that they would have preferred receiving the programme only via one-to-one home visits rather than group sessions. In the second quote below, the participant identifies time constraints as a reason for this preference.

> I think you should maybe go to their homes. It would be easy that way, so whoever wants to go to the venue can go there, and the others you can visit in their homes. (Participant #230, low attender)

> Maybe you could visit parents separately at their homes and not be in groups like we were. People do not have the time to go to sessions… I suppose one-on-one, you could go at whatever time is best for the person. (Participant #368, low attender)

Structural facilitators. Parents mentioned few structural facilitators. They liked that the programme was delivered in the morning as this fitted in with dropping off and fetching children from school. Additionally, parents who lived very close to the venue identified this as a facilitator as they were able to walk there.

Personal facilitators.

Sense of commitment and readiness to change. What seemed to set the high attenders apart from the low attenders was a greater sense of commitment and readiness to change – the opposite of the lack of interest that appeared to be a barrier to engagement. When reflecting on why they enrolled in the SCFP, high attenders clearly made the connection between the programme's aims and how this could address their needs. These parents also talked about changes that they could see in themselves and their children, which they attributed to the programme. High attenders often mentioned how they rescheduled other commitments, or

shifted session days if necessary, so that they would not miss sessions. Although this could reflect greater problem-solving skills and flexibility, it could also be that these parents had greater means to overcome barriers, perhaps through higher levels of social capital.

> I think they underestimated what the programme could do for them. I used to be like that at first… I just used to go there to waste time, but then I actually wanted to go when I realised that it helps children. (Participant #79, high attender)

> I think people firstly need to understand how this is going to benefit them at the end of the day, because others just see all the papers, and then they think that they are here to be schooled, or that they are at school. They do not understand that these papers will help them… there are some people that will not come because they are people that are not serious. (Participant #131, high attender)

> Maybe, when I think about it, people get there and they feel like it is useless going there. Maybe they see themselves as fine and feel that they do not have any problems that Sinovuyo could help them with. Then they feel that it's useless going there because it almost feels like they going back to school. Other people speak like that - they say that they are too old to be going back to being taught like they are in school… they feel that they are fine with their children. (Participant #201, high attender)

The last two quotes above imply that some participants may have felt that attending the programme was like going to school, and that this was a negative association. Although the programme was facilitated collaboratively rather than didactically, some participants may have felt that they were being seen as children. The forms and manuals distributed at sessions may also have deterred those participants with literacy challenges. Educational status of participants was low, with only 18.24% of the intervention group having completed high school.

Two high attenders commented on how they would like the SCFP team to connect them with employment opportunities. Participant #201 mentioned how she went to the programme to gain experience that would assist her with finding work:

> If Sinovuyo could maybe find a job for us parents because I went there to get experience and knowledge and I am very grateful for that… now, I am looking for a job, even today. (Participant #210, high attender)

Family buy-in. Family buy-in appeared to be a facilitator of enrolment, attendance, and home practice completion. High attenders frequently mentioned how their families,

including their children, had bought into the programme and had supported their attendance. Two of them spoke specifically about their husbands and how they had became engaged in the programme through getting updates on session content:

> Every time when I come back from a session, I would come home and explain to him [her husband] what it is that we did. I would explain to him that I would like us to practice that particular thing in the house, because I will be practicing it too, and by involving him I saw that he, too, became interested. (Participant #91, high attender)

> Firstly, my husband did not trust the programme, but the more I went, the more positive changes there were in the household, and the more he liked the programme. (Participant #181, high attender)

Some participants spoke about the support of their parents and how they had appreciated how the programme deterred them from negative spaces, such as shebeens (i.e., informal alcohol-serving establishments located in townships), by providing a pro-social activity for them to get involved with:

> My mom was happy because going to the programme meant that I did not spend most of my time in the township. She liked that I had something that I was busy with. (Participant #80, high attender)

> My dad used to let me go. He did not have a problem with it because he said that he wanted me to get some help. He saw when I used to shout at my child, and that is why he let me go there. (Participant #201, high attender)

> They were very happy. They used to motivate me to go there, because they could see what kind of person I was towards my children, so they used to push me and tell me to go because I would get help there. (Participant #363, high attender)

> My family were very happy because, firstly, it kept me occupied. Before, if I was not at home, I would be at a place where people are drinking and doing nothing for themselves… but if my mother knew that I was at Sinovuyo, even for an hour, she knew that at least I was not in that environment. So she was very happy, and used to encourage me to go to the programme (Participant #60, low attender)

Many participants commented that it was their children that encouraged them to attend as they liked the childcare at the sessions and the stories that their parents would learn at the sessions:

> They also want to go with me to the sessions. They would ask if I am going to Sinovuyo and remind me about my books because we were given books there…my children love listening to them. (Participant #363, high attender)

> Even if I was lazy to go, my mother would always remind me to go to Sinovuyo. My child pushed me to go, because she liked that they used to play there and do different activities. (Participant #79, high attender)

For most low attenders, family buy-in did not appear to be salient. In response to prompts about their family's attitude towards the programme, they would say things like, "They were fine with it".

Programmatic facilitators. The programme, or elements thereof, appeared to enhance engagement for some participants. Parents who enrolled were more likely to remain in the programme than drop out. Parents frequently commented on how they liked the SCFP content, the facilitation style used by the facilitators, and the dynamics in their groups. Some of them mentioned that the experience was 'like a support group' and that they enjoyed being able to talk openly in a confidential space.

> At home you have stresses and there is no-one that you can speak to, but when you get there, you vent about your problems so you understand each other. I got a lot of support there and we were told if someone has a problem, they need to talk about it, because everything in the group was confidential. (Participant #181, high attender)

Following from this, two participants commented on how attending the programme provided a positive alternative to drinking in the shebeen:

> It was an opportunity for me to forget a lot of things, and also to stop drinking for that time. I would be busy and so not available to do things like drink the whole day. (Participant #202, low attender)

Although some parents said that there should be greater incentives for attending (e.g., vouchers, groceries), others commented that providing a meal at the programme facilitated their attendance:

> We would come to Sinovuyo and have lunch and eat - that is one of the things that attracted people. We would all eat together. We come from different homes - some who come have not eaten, but you know that as soon as you get to Sinovuyo, you will eat. If I am not going to eat, then I might as well not go – some people feel that way. So I just wish that Sinovuyo would carry on… (Participant #279, low attender)

> I had my breakfast and lunch there. When I got home, I would give my child an orange or an apple that I kept for him from the programme. (Participant #210, high attender)

Participants' experience of the research. Since the programme was nested within an RCT, it was important to understand parents' perceptions of the research. Their experience of the baseline assessment may well have acted as a barrier or facilitator to enrolling in the SCFP. An unexpected finding was that three of the interviewed non-enrolees appeared to think that the visits by the research assistants were, in fact, the SCFP intervention. Explanations of why this misunderstanding may have occurred are presented in the Discussion chapter (Chapter 9).

> I really liked it, because, at first, these things were not available. I really enjoyed it, because I could get some encouragement from people, especially about the way that parents should treat themselves. I felt free and happy about it. (Participant #367, non-enrolee)

> I like the programme because it changes the children as well. I could see that my children's attitude also changed and they did things themselves now. When [research assistant's name], arrived with a sandwich for her the second time, she went to wash her hands first, and I was surprised. I really liked it and it taught us a lot. My child liked playing and also liked the sandwiches that [insert research assistant's name] brought along. (Participant #176, non-enrolee)

Many participants commented that they welcomed the food and incentives brought by the research assistants to research visits. Although participants did not explicitly say that they enrolled in the study because of these incentives, many may have done so, especially when considering the high levels of poverty in the targeted communities. Jewkes and colleagues (2012) found that 66.9% of women and 40.9% of men indicated that a R20 (≈ USD 1.50) incentive had been part of their motivation to enrol in an RCT of an HIV-behavioural intervention.

> I would be sitting and thinking, "Oh my Lord, I wonder what my kids are going to eat when they get back from school?".... and then they would appear and I would smile, because I know that they would at least leave a loaf of bread. I would be happy because before I had no idea what they would eat. (Participant #115, low attender)

> This lady was going to come to my house and teach me something, but I was hungry and so were my children. That is what made me not feel happy at first… but when she said she is going to give me bread, I was then happy. (Participant #363, high attender)

While there tended to be a positive response to groceries brought for assessments, one high attender found that it highlighted for her her own poverty and made her feel a sense of guilt. These feelings were because she was unable, due to financial constraints, to provide the same type of food to her child on a regular basis. She felt that she disappointed her child when she could not give her the same snacks the day after the assessments:

> I enjoyed it, but on the other hand, I did not like it, because bread and biscuits are not always available for us, because here, at home, no one works… On the day that they arrived I was very happy because I could see that my child was very happy, but then I told myself to be happy around her because I don't like crying in front of her... then she expected that I would do it the following day as well… She would take a blanket and say, "Mom, let's do the activities again" and I do not have a way to do that… All in all, we really enjoyed it, but I pretended because I knew what the situation was like at home...I do not have the means to make sure that the biscuits are always available for her. (Participant #210, high attender)

The research visits appeared to be viewed positively by all participants. Many spoke about how they found the research experience to be cathartic as they were able to talk about things that they would not usually feel comfortable discussing with others. Many commented on how they trusted the research assistant and understood that their responses given in the assessments would remain confidential. This trust is displayed in the high level of disclosure of sensitive information, such as HIV-positive status.

> It was my first time sharing my personal things with other people. When I shared with (insert research assistant's name), after I shared with her, I was able to share with other people. (Participant #368, low attender)

> For me, it was a platform to open up to someone because, to be honest, I do not have someone to open up to. Sometimes, I am even scared to even open up to my mother since there are things that I feel like I cannot talk to her about. I end up keeping a lot of things inside, but when [research assistant] came, I felt relieved and now the burden is lighter. It was a good thing for me. (Participant #60, low attender)

> I felt free, because at night your problems come back to you and you don't sleep… but ever since I shared my problems, I have found I it easier to sleep at night and I am not

> shouting at my children as much… speaking to people helped me. (Participant #309, non-enrolee)
>
> For me it felt like sharing with your family, so I felt that I could share. I knew that no-one would laugh at me or undermine me. It feels like you are sharing with a sister. (Participant #181, high attender)

Recruitment. Participants seemed to prefer door-to-door recruitment, the type of recruitment that was used during the RCT of the SCFP, to the idea of recruitment via posters in clinics and other public spaces or presentations at community meetings. Stated reasons for this preference included that door-to-door recruitment provides an opportunity for a facilitator to explain the programme and answer questions the parent may have, and for parents to assess whether the programme may be beneficial for them:

> When they come inside your house, they are able to explain the programme to you and make sure that you understand it. If it was advertised on a poster, I would just read the first bit and the end bit and not really pay attention to it because I would think I didn't have that problem. When you talk and communicate, it is much easier. (Participant #344, high attender)
>
> It is better to go house-to-house because if there is an announcement that people should go to the community hall, a lot of people do not follow up on it, unless there is free food or free blankets - people want anything that comes easy. It's better when they come to your house and explain, because you will see that your child also has that problem and you will see that these people can help and make things easier for you. (Participant #201, high attender)

Another reason was that in-person recruitment might make programmes more accessible to parents with low literacy levels, and help ensure that they understand what involvement entails:

> It is better to hear something rather than reading something from a piece of paper. When you read, you get tired, but when you hear it, you are more interested in it. Going from door-to-door is much better. (Participant #135, low attender)
>
> If you have a question, you can ask them… on a poster, you might read it and there might be a word that you do not understand, but if there is someone that comes to your house, they will be able to answer you. (Participant #181, high attender)

One high attender suggested that if the SCFP is delivered again in the same areas, parents that have already graduated from the programme should run parent recruitment campaigns. These "alumni" are likely to be seen as more credible than strangers as they would come from the same community.

> If they were to call all of the parents that took part in the sessions to do a small campaign… it is easy to hear it from us because we are from the same community, so that could increase the number of people going. (Participant #210, high attender)

During recruitment, it is critical that parents gain a clear understanding of what the programme is about and what commitment will be required from them. At this stage, facilitators can increase buy-in by helping parents gauge the potential benefits that the programme may offer them. For successful engagement, the perceived benefits of attending (e.g., improved child behaviour) must outweigh the potential costs (e.g., time and effort, financial cost). This type of pre-programme consultation also provides an opportunity for a positive relationship to develop between the facilitator and the parent. A positive relationship is essential as parents are more likely to attend when they know and trust the person who will be delivering the programme. Finally, as one participant stated, it also provides a space in which to discuss potential barriers to engagement and strategies to overcome them:

> What you can actually do is go to the families. What is important is the person first, then when the person agrees, then you can ask the person what challenges they may experience in coming to the programme. (Participant #91, high attender)

Summary of qualitative findings. This chapter presented the participants' perspectives on the barriers and facilitators to engaging in the SCFP during its evaluation. The most significant barriers that were raised included low SES, gaining or seeking employment, poor weather conditions, health difficulties, alcohol misuse, and a lack of interest or motivation. Facilitators that were noted most frequently included a sense of commitment to the programme and a readiness to change, as well as buy-in from family

members and the support gained during sessions. The next chapter will explore the predictors of engagement and will draw on these findings by including data on corresponding variables from the self-report data – these include variables related to SES (i.e., hunger, household employment), health, alcohol misuse, and social support. A number of important barriers, for which there is no corresponding quantitative data (e.g., readiness to change) will be discussed further in the Discussion (i.e., Chapter 9).

Chapter 6: Engagement Models – Methods and Results

This chapter presents the engagement models, which model the relationship between the possible predictor variables (with data collected at baseline) and three distinct aspects of engagement in the SCFP, namely enrolment, attendance, and level of home practice completion. These models included only the 148 participants who were allocated to receive the programme as part of the RCT of the intervention, and who therefore had a possibility of engaging. Both the methods and results are presented in this chapter.

Methods

Variable selection. The decision on which variables to include in the models was based on findings from the individual interviews presented in the previous chapter as well as the scientific literature presented in Chapter 2. Qualitative data suggested that the following baseline variables should be included in the models: parental alcohol misuse, parental social support as well as variables related to SES and parental health. The literature supported the inclusion of the following baseline variables: child age (Dakof et al., 2001; Prinz & Miller, 1994), child sex (Dakof et al., 2001; Firestone & Witt, 1982), parental age (e.g., Dumas et al., 2007; Peters et al., 2005), marital status (e.g., Dumka et al., 1997; Heinrichs et al., 2005; Reyno & McGrath, 2006), high school completion (Nix et al., 2009; R. Spoth et al., 1999), parental depression (Baydar et al., 2003), parenting stress (e.g., Calam et al., 2002), child behaviour (Dumas et al., 2007; Heinrichs et al., 2005; Sanders et al., 2007) social support (e.g., Baker et al., 2011), positive parenting and non-violent discipline (e.g., Charlebois et al., 2001), harsh parenting (physical punishment use and emotional punishment use) (Baydar et al., 2003; Furey & Basili, 1988; Kazdin et al., 1995) and variables related to SES (household employment and household hunger level) (e.g., Baker et al., 2011; Chacko et al., 2016). As highlighted in the literature review, findings on predictors have been mixed, which made it difficult to exclude many of them from the analyses. Additionally, predictors of engagement

have not yet been explored within the South African context, and so there is limited local insight to guide the selection of variables.

A variable less explored in the literature, but which was included in the analyses since it may well impact engagement in low-income communities in South Africa, was whether participants' experienced IPV in the past month. The importance of including this variable was suggested through my work as a programme manager as cases of IPV were often raised by facilitators in their weekly supervision sessions. It was not raised by participants in the qualitative interviews, possibly due to the stigma associated with being a victim of IPV (or perhaps because this issue did not, in fact, impact engagement; Strebel et al., 2006). Although research on IPV within the context of parenting interventions has been limited, a recent study showed that HIV-positive women who reported abuse were less likely to engage in HIV care and treatment (Hatcher, Smout, Turan, Christofides, & Stöckl, 2015). The prevalence of this problem in South Africa is high, and so it is important to understand how individuals affected by abuse engage with services (Abrahams, Jewkes, Hoffman, & Laubsher, 2004; Dunkle et al., 2004; Parry, 2005).

Also, both study wave, as well as the pair of facilitators to which participants were allocated, were included as predictor variables. Wave was included as a variable because there may have been differences between the locations and time periods that are not captured by other variables. For example, while both communities were violent and crime-ridden, and the team experienced an armed robbery in each of them, the implementation team had a subjective sense that Nyanga was more challenging for participants in terms of their everyday safety. Site C in Khayelitsha, again perhaps only subjectively, appeared to have a greater sense of learned helplessness (Abramson, Seligman, Teasdale, 1978) with participants often commenting on low motivation as a barrier to programme engagement. Also, weather conditions were very different between waves during programme implementation - rainy and

cold for Wave 1, and sunny and clear for Wave 2. Numerous Wave 1 participants raised poor weather as a barrier to programme engagement in the individual interviews. Facilitator pair was important to include as characteristics of the facilitators, such as their ability to form good relationships with parents and their facilitation style, may impact engagement (Koerting et al., 2013).

The attendance and home practice completion models also included a variable that captured the parenting groups to which participants were assigned. Particular groups may have different dynamics and levels of cohesiveness, which may influence levels of engagement (Borden et al., 2010). "Parent group" was not considered in the enrolment model since participants only met their group members when they attended their first group session at the programme venue – and so for the attendance and home practice models, which included only programme enrolees, including group was relevant.

Measures. Data on the included variables were collected via a baseline survey completed by caregivers (see Appendix A). For all survey items, except those focused on demographic and programmatic information, participants were asked to reflect on the past month. This timeframe often differed from the original scales, but was chosen so that there would be consistency across the survey and also so that there was a chance for parents' behaviour to change. Since the intervention was delivered over 12 weeks, participants were asked at post-test to reflect not on the previous 3 months, but only the last few weeks where changes might have occurred. The measures included in the survey will now be presented.

Enrolment. Enrolment captures whether a participant who was assigned to the intervention group, attended at least one of the 12 sessions (Baker et al., 2011), where attendance relates specifically to attendance at the venue with the group, and not home visits. If participants received home visits, but no group-based sessions, they were coded as non-enrolees, on the basis that facilitators, rather than parents, initiated home visits. Three

participants were an exception to this rule as they had contacted the facilitators before the start of the programme to ask if they could have sessions at home. In these three cases, the reason for this request was health problems – one participant was experiencing a problematic pregnancy and was homebound, while the other two experienced difficulties with walking. Each of the 148 participants was coded as either a non-enrolee or an enrolee. Before or early on in the programme, some non-enrolees, or their families in cases where they could not be reached, gave the facilitator a reason why they could not enrol in the intervention – these are presented alongside the enrolment rates further into this chapter.

Attendance. Attendance data was collected via attendance registers signed by participants at group sessions as well as home visit forms submitted by facilitators. Attendance referred to the number of SCFP sessions, out of a maximum of 12, attended by an *enrolled* participant. If a participant missed a group-based session, a facilitator would often conduct an individual home visit in which they would go through the content with them. If the full programme session was delivered via a home visit, the participant was considered as having attended that session (Lachman et al., 2016a). If only a portion of the programme content was covered, they were recorded as having missed the session (Lachman et al., 2016a). Since the attendance model only included enrolees, who all attended at least one session, the number of missed sessions ranged from 0 to 11.

Home practice. As an alternative to facilitator report on quality of participation, parent report of the extent to which they completed their home practice was included as an indicator of their quality of participation in the SCFP. In their review of engagement data from 262 studies on parent training, Chacko and colleagues (2016) found that only 16 studies reported data on home practice completion. The authors state that more studies should document this process because of the mechanism of action of behavioural parenting programmes is hypothesised to occur through parents implementing taught skills between sessions. This

suggestion is supported by findings from a study by Berkel and colleagues (2016) on the impact of home practice on programme outcomes. This study showed that home practice led to improvements in parenting behaviour that were over and above the contribution of attendance at sessions.

Home practice completion was coded as the number of days out of seven for which an enrolled participant implemented their home practice after a specific session. At all but the last session, parents were given a checklist (see Appendix O for an example) to take home, complete, and return to facilitators at the next session attended. Each checklist focused on skills covered that week and in previous sessions, with the core skill that needed to be practised typed in bold. Parents would indicate on this form which days they had practised each skill. The core skills for each week were as follows:

Session 1: Spend 5 minutes of quality time with your child

Session 2: Practice Say-What-You-See with your child during quality time

Session 3: Practice Naming Feelings by commenting on your child's emotions three times per day

Session 4: Praise your child three times per day

Session 5: Reward your child for a specific behaviour

Session 6: Use positive, specific instructions with your child

Session 7: Introduce household rules to your child

Session 8: Use "ignore, distract, and redirect" for challenging behaviour

Session 9: Introduce 5-minute cool down to your child

Session 10: Use 5-minute cool down as a last resort for a difficult behaviour

Session 11: Involve your child in problem-solving

Wave. Participants were either in Wave 1 (coded as 0) or Wave 2 (coded as 1). The SCFP was delivered to Wave 1 intervention group participants between June and August

2014 in Khayelitsha and to Wave 2 between September and November 2014 in Nyanga. As mentioned, there may have been differences between the locations and time periods that are not captured by other variables – for example, levels of crime and violence, weather conditions, level of learned helplessness, and so forth.

Facilitator pair. Based on their availability, participants were either allocated to Facilitator Pair 1 or Facilitator Pair 2. Facilitator Pair 1 delivered the programme on Tuesdays, Fridays, and Saturdays, while Facilitator Pair 2 delivered the programme on Wednesdays and Thursdays. During Wave 2, Facilitator Pair 2 also ran the programme on Fridays.

Programme group. Each participant was allocated to one of 11 programme groups (coded as 1 to 11), each containing between 11 and 17 parents (M = 13.45; SD = 1.57). Group allocation was included as a variable since there may have been a dynamic in each group that influenced attendance and home practice completion.

Parental age. Parental age was included as a continuous variable.

Child age. All children in the study were between the ages of two and nine years. Child age was included as a dichotomous variable, with two- to five-year-olds being coded as "younger child" (0) and those between six and nine years coded as "older child" (1). These same age categories were used during block randomisation to ensure balanced groups.

Child sex. Child sex was coded as 0 for male and 1 for female. This variable was also used in the randomisation process.

Parental experience of IPV. A simplified version of the Revised Conflict Tactics Scale Short Form (CTS2S; 10 items) was used to assess participants' exposure to IPV (Straus & Douglas, 2004). Assessments used adult self-report on the frequency of negotiation (e.g., "partner suggested compromise to an argument"), physical assault (e.g., "partner hit me with something"), psychological aggression (e.g., "partner insulted or swore at me"), sexual

coercion (e.g., "partner used force to have sex with me"), and physical injury (e.g., "I felt pain the next day"). Responses were coded on a 4-point Likert-like scale of 0 to 4 (0 = *never happened*; 4 = *more than 3 times in the past month*).

The CTS2S provides an overall indication of IPV on a level of severity (sum of items) and prevalence (a dichotomous variable indicating experience of violence or not) as well as for each subscale. To reduce the number of parameters in the models, a dichotomous variable was created to indicate whether the participant had or had not experienced any form of IPV included in the CTS2S in the past month (0 = *had not experienced IPV in the past month*; 1 = *had experienced IPV in the past month*).

Household employment. Household employment was coded as a dichotomous variable indicating whether or not at least one person was employed in the participant's household (0 = *no-one employed in the house*; 1 = *someone employed in the house*). This variable was constructed from two separate dichotomous variables, one asking participants whether they were currently employed and the other asking whether anyone else in their household was employed. Participant employment status was not included in the analyses since only 18 out of 148 participants (12.16%) were employed, either part-time or full-time, at baseline. Although employment levels are low in the targeted communities, the particularly high number of unemployed participants may be due to the recruitment strategy used for the RCT. Research assistants typically recruited participants on weekdays during regular working hours and on some weekends during the mornings. This approach may have excluded parents who return home from work in the evenings or who worked on weekends.

Household hunger level. The level of hunger and food insecurity in the household provides an indication of household poverty (Armstrong, Lekezwa, & Siebrits, 2008). Experiencing hunger or food insecurity in the past month was assessed using nine items from the Hunger Scale Questionnaire (Labadarios et al., 2003). Participants were asked to respond

with a "yes" (coded as 1) or "no" (coded as 0) to the occurrence of running out of money to buy food, cutting the size of meals or skipping meals because of no food in the house, and going to bed hungry because of no money to buy food. If they responded with a "yes" to any of these situations, they would then be asked if it had happened in the last 30 days as well as the last 5 days. The nine items were then summed to get a total Hunger Scale score, which ranged from 0 (no hunger) to 9 (most hunger).

Single parenthood. Participants were asked to identify their marital status from the following response options: 1 = *single*, 2 = *partnered*, 3 = *married*, 4 = *separated*, 5 = *divorced*, 6 = *widowed*, 111 = *other*, 999 = *refused*. Responses were then dichotomised into single (coded as 0; comprised of "single", "separated", "divorced" and "widowed") or partnered (coded as 1; comprised of "partnered" and "married"). No participants responded with "other" or "refused."

Completed high school. Participants were asked to select their highest level of education completed from the following response options: 0 = *no schooling*, 1 = *some primary school*, 2 = *completed primary school*, 3 = *some high school*, 4 = *completed high school*, 5 = *post-matric degree/diploma*, 6 = *post-graduate degree*, 111 = *other*, 666 = *don't know*, 999 = *refused*. Responses were then dichotomised into "did not complete high school" (coded as 0; comprised of "no schooling", "some primary school", "completed primary school" and "some high school") and "completed high school" (coded as 1; comprised of "completed high school", "post-matric degree/diploma" and "post-graduate degree"). No participants responded with "other", "don't know" or "refused."

Alcohol misuse. Participants' misuse of alcohol was assessed using one item relating to alcohol consumption during the past month. Misuse was based on three or more drinks or five or more drinks in one day in the past month for females and males, respectively, an approach which has been shown to identify risky drinkers in Cape Town (Mertens, Ward,

Bresick, Broder, & Weisner, 2014). Responses were coded dichotomously (0 = *no alcohol misuse*; 1 = *alcohol misuse*).

Health problems. Participants' health status was assessed using a count of health problems, from a predetermined list, that they identified themselves as having (0 = *no*; 1 = *yes*). These health problems included HIV, high blood pressure, epilepsy, asthma, shingles, heart disease, cancer, diabetes, arthritis, pneumonia/bronchitis, an injury or burn, and having experienced a stroke. The count ranged from 0 (no disclosed health problems) to 12 (12 disclosed health problems).

Child behaviour problems. Parent self-report on child behaviour problems was assessed using the 36-item Eyberg Child Behavior Inventory (ECBI; Eyberg & Ross, 1978), which has been widely used in clinical practice as well as in evaluations of parenting programmes (e.g., F. Gardner, Shaw, Dishion, Burton, & Supplee, 2007; Hutchings, Bywater, et al., 2007). This survey examines disruptive behaviours in 2- to 16-year-olds using two scales, the Intensity Scale and Problem Scale. For the Intensity Scale, using a 7-point Likert-like scale (1 = *never*; 7 = *always*), parents rated how often a specific child behaviour problem occurred in the past month. Parents then moved to the Problem Scale where they had to respond with a "yes" (coded as 1) or "no" (coded as 0) to whether this behaviour was problematic for them. Responses from each scale were summed to create total scores, with higher Intensity Scale scores indicating greater frequency of problem behaviours and higher Problem Scale scores indicating that parents identified more problem behaviours as problematic for them. The suggested clinical cut-off score for psychopathological problem behaviour is 131 for the Intensity Scale and 15 for the Problem Scale – the latter was used as an inclusion criterion for the RCT (Eyberg & Pincus, 1999).

Only the Problem Scale was included in this model set since levels of child behaviour would likely only impact these variables if the parent's perception of these problems, rather

than their frequency, is considered. One would hypothesise that parents who find their children's behaviour more difficult would be more likely to enrol in an intervention targeting problem behaviours to seek help.

Positive parenting. Parent self-report of positive parenting was assessed with the Parenting Young Children Scale (PARYC) subscales for supporting positive behaviour (7 items; e.g., "notice and praise your child's good behaviour") and setting limits (7 items; e.g., "stick to your rules and not change your mind") (McEachern et al., 2012). The PARYC measures the frequency of specific positive parenting behaviours towards children in the past month on a 7-point Likert-like scale (0 = *never*; 6 = *always*), as well as whether parents perceive performing these behaviours as problematic for them (0 = *no*; 1 = *yes*). Items were summed to create a frequency score and a problem score, with higher frequency scores indicating more regular use of positive parenting and higher problem scores indicating that parents found their frequency of implementing positive parenting as more problematic for them. As with the ECBI, the model set only included the problem score.

Physical and emotional punishment, and non-violent discipline. Parent self-report of the use of physical and emotional punishment as well as non-violent discipline techniques was assessed using the respective subscales of the ISPCAN Child Abuse Screening Tool – Parent version (ICAST-P; 7, 10 and 4 items respectively) (Runyan et al., 2009). This measure was developed by international experts, field tested in eight countries, and reviewed internationally using the Delphi process, with the explicit goal of being valid in a variety of cultures and contexts (Runyan et al., 2009). The ICAST-P measures the occurrence of participants' punishment or discipline behaviour towards the child over the past month using a 5-point Likert-like scale (0 = *never*; 4 = *more than 10 times*). Items include "How often did you shake (your child) in the past month?" (from the physical discipline subscale), "How often did you threaten to abandon (your child) in the past month?" (from the psychological

discipline subscale), and "How often did you explain why something was wrong to (your child) in the past month?" (from the non-violent discipline subscale). Items within each subscale are summed, with higher scores indicating greater usage of each punishment or discipline style.

Social support. Social support was measured using the 8-item emotional/informational support subscale of the Medical Outcome Study Social Support Survey (MOS-SSS; Sherbourne & Stewart, 1991) . The MOS-SSS has been previously used in South Africa, but in the context of assessing social support among caregivers of children in HIV-endemic areas (Casale, 2013), HIV-positive women (Gaede et al., 2006) and black diabetes outpatients (Westaway, Seager, Rheeder, & Van Zyl, 2005).

In validation studies, this scale has shown excellent internal consistency (α = .91 to .97) and test-retest reliability (α = .72 to .78; Sherbourne & Stewart, 1991) . For this subscale, parents report on the frequency of receiving emotional support (e.g., "someone you can count on to listen to when you need to talk") on a Likert-like scale of 1 to 5 (1 = *none of the time*; 5 = *all of the time*). Items are summed, with a higher score indicating a greater level of social support.

Parental depression. Parental depression was measured using the 21-item Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996). This measure has strong psychometric properties and has been translated into isiXhosa and validated in South Africa (Steele & Edwards, 2008). This validation study found excellent internal consistency (α = .93) in a sample of 122 isiXhosa-speaking adults. The BDI-II has also been used to assess parental depression in other RCTs of parenting programmes in high-income countries (e.g., F. Gardner, Burton, & Klimes, 2006; Hutchings, Bywater, et al., 2007; Lees & Ronan, 2008).

Participants chose from responses describing various symptoms on a 4-point Likert-like scale (e.g., Worthlessness: 0 = *I do not feel I am worthless*; 1 = *I don't consider myself as*

worthwhile and useful as I used to; 2 = *I feel more worthless as compared to other people*; 3 = *I feel utterly worthless*). Responses were then summed, with total scores ranging from 0 to 63 - higher scores indicate greater levels of depressive symptoms.

Parenting stress. Parenting stress was measured using the 36-item Parenting Stress Index Short Form (PSI/SF; Abidin, 1995). This scale has been used widely in many countries (e.g., L. S. Anderson, 2008; Foucault & Schneider, 2009; Oburu & Palmérus, 2003), including in South Africa (Moolla, 2012; Potterton, Stewart, & Cooper, 2007). In a recent study of vulnerable women in Cape Town, it had strong internal consistency ($\alpha = .88$; (Moolla, 2012).

PSI/SF items refer to parenting stress due to marital conflict (e.g., "taking care of children causes problems between me and my spouse"), sense of parental competence (e.g., "I feel inadequate as a parent"), and lack of support (e.g., "I feel alone and without friends"). Responses are coded using a 5-point Likert-like scale with 1 indicating "Strongly Agree" and 5 indicating "Strongly Disagree". Items are summed to create a total score, with higher scores indicating less parenting stress.

Data management. After the quantitative data was collected and merged (described in Chapter 3), it was cleaned to ensure that all variables were within the range of their response options, to reverse code variables when necessary, and create total scores for scales and subscales. All identifying information was excluded from the final dataset and research identification numbers were used to identify participants. Syntax from the data cleaning, which was done in SPSS Version 23 (IBM, 2015), was saved so that there could be an accurate record of changes made to the dataset.

Reliability. Cronbach's alphas were calculated for all scales, and are presented in **Table 11** below. This statistic measures internal consistency amongst the items used to construct a certain scale. For positively correlated items, alpha ranges from one to zero,

where one indicates perfect internal consistency and zero the lowest reliability. Conventionally, values above .70 indicate an internally-consistent or reliable scale (Bland & Altman, 1997). Although only baseline intervention group data is included in the models presented in this chapter, alpha is presented for both groups for each assessment time-point to avoid duplication in the next chapter.

All measures, except the ICAST-P subscales, had a Cronbach's alpha of greater than .70 at each assessment time-point. Since this statistic assesses how items are inter-correlated, it is not suitable for scales, such as those in the ICAST-P, which simply count the occurrence of certain distinct behaviours (Weissinger, Caldwell, & Bandalos, 1992). Rather, it is only suitable for scales that measure a particular latent construct, such as depression or parenting stress, and for this reason the variable was used in the models, despite its low alpha. The alpha levels indicate that the other study measures have adequate reliability and so could be used in the models.

Table 11

Cronbach's Alphas for Measures Used in the Models

Measure	Assessment time-point		
	Baseline	Post-test	One-year follow-up
BDI-II			
Full sample	.90	.91	.93
Control	.91	.91	.94
Intervention	.89	.89	.93
PSI/SF			
Full sample	.91	.93	.88
Control	.91	.93	.90
Intervention	.90	.93	.86
ECBI (Intensity)			
Full sample	.80	.89	.90
Control	.80	.89	.90
Intervention	.80	.88	.89
ECBI (Problem)			
Full sample	.73	.90	.92
Control	.73	.91	.92
Intervention	.74	.89	.92
MOS-SSS (Emotional/ informational support)			
Full sample	.85	.88	.91
Control	.86	.89	.91
Intervention	.84	.87	.92
Hunger Scale			
Full sample	.87	-	.90
Control	.87	-	.91
Intervention	.87	-	.89
PARYC (Frequency)			
Full sample	.77	.80	.80
Control	.80	.82	.78
Intervention	.72	.74	.81
PARYC (Problem)			
Full sample	.85	.88	.84
Control	.87	.89	.82
Intervention	.81	.87	.86

Missing data. The number of valid observations used in each of the engagement models is indicated as "n valid" in **Table 12** below. This analysis was not an intent-to-treat analysis and there was little missing data, so listwise deletion was therefore used. Most variables had no missing data, and the largest amount missing was depression scores (8 of 148 participants).

Table 12

Missing Data in Predictor Variables for Engagement Models

Variable	*n* valid	*n* missing (%)
Wave	148	0 (0)
Facilitator pair	148	0 (0)
Programme group	148	0 (0)
Child age	148	0 (0)
Child sex	148	0 (0)
Marital status	148	0 (0)
Completed high school	148	0 (0)
Experience of IPV	147	1 (0.68)
Parental alcohol misuse	148	0 (0)
Household employment	148	0 (0)
Parental age	148	0 (0)
Parental depression	140	8 (5.41)
Parenting stress	143	5 (3.38)
Child behaviour (Problem)	148	0 (0)
Social support	148	0 (0)
Positive parenting (Problem)	146	2 (1.35)
Physical punishment	147	1 (0.68)
Emotional punishment	148	0 (0)
Non-violent discipline	147	1 (0.68)
Hunger scale	148	0 (0)
No. of health conditions	143	5 (3.38)

Analysis

Prior to the formal model fitting, observed data was summarised through descriptive statistics. Also, relationships amongst predictors, and between each predictor and outcome, were explored. This exploration informed the choice of the exact model specification.

The objective of the analysis was to estimate effect sizes, that is, the impacts of predictors on three elements of engagement, namely enrolment, attendance, and level of home practice completion. Data was analysed using generalised linear mixed models, in particular, mixed effects logistic regression models. Logistic regression is an appropriate model choice when the outcome of interest is a count of how many times an event occurs, within a fixed number of trials (Field, 2009). More specifically, it directly models the impact of predictors on the odds of the event - for this study, the odds of a participant enrolling in the SCFP, missing a session, or practising home practice tasks on a given day. The effect size generated from this model type is an Odds Ratio (OR). The estimated ORs were reported together with 95% CIs and *p*-values, which were based on the asymptotic normality of the parameter estimator.

The relationship between each predictor and the targeted outcome, while accounting for all other predictors, was of primary interest. These adjusted ORs were estimated using multivariable regression models (Hosmer, Lemeshow, & Sturdivant, 2013), which consider the relationships between the multiple predictors and the response simultaneously. In this work, I refer to these analyses as multivariable throughout rather than multivariate, as the latter term is also typically used to refer to the analysis of the relationships amongst multiple variables, where there is no distinction between predictors and outcomes (e.g., principal component analysis), or there are multiple outcomes jointly considered (Hidalgo & Goodman, 2013). Due to the limited sample size, all predictors were included as main effects – in other words, no interactions amongst predictors were modelled. As an exploratory

component, we also estimated unadjusted ORs using univariable regression models. These models model the relationship between one predictor and the outcome without controlling for any other variables.

Due to the longitudinal study design and the delivery of a multi-session intervention to groups of participants rather than individuals, observations were not independent. As a result, random effects were used to account for this correlation. For attendance, two random effects were included – a group effect and a nested participant effect within group, since group dynamics and personal characteristics, which may not have been captured by the included baseline variables, may have affected participants' attendance. For home practice completion, three sources of repeated measures needed to be considered – programme group, session, and participant. Since there may be unique interactions between groups and the content of a particular session, a random effect capturing the combination of group and session was included in the model, as well as a second crossed random effect for participant.

Prior to interpreting ORs, models were compared to ones in which there were no predictors using a likelihood ratio test. This was done to assess whether there were any relationships between the predictors and the outcome. More generally, any model comparisons were conducted using likelihood ratio tests (for nested models) or by comparing Akaike Information Criterion values (for non-nested models). The assessment of model fit and the appropriateness of assumptions was done primarily by visually scrutinising diagnostic plots, which included plots of residuals against fitted values and individual predictors, and distributions of random effects. The observed counts were also compared to the model-fitted expected counts. For the models without random effects, the Hosmer-Lemeshow test (Hosmer & Lemeshow, 2013) was used to assess goodness of fit as measured by the deviations between observed and expected responses.

At times during data exploration and model fitting, questions arose. For example, there may be alternative ways of specifying random effects in the home practice model depending on beliefs about how independently a given participant responds to different sessions. To explore these questions, we fitted a small number of alternative models and assessed the robustness of findings – this served as a sensitivity analysis.

In discussing these models, I chose not to use the term "statistically significant" when reporting results. This decision was made since the actual magnitude of the *p*-value, rather than whether it falls to one side of an arbitrary cut-off, is informative of how much evidence our study provides for or against a hypothesis of interest. This view is in line with strongly emerging guidelines against reporting only statistical significance, which accumulatively can lead to substantial misrepresentation of findings on a topic (e.g., Nickerson, 2000; Schmidt, 1996; Ziliak & McCloskey, 2008). For example, if we wanted to explore the relationship between child sex and enrolment, starting with a null hypothesis of no relationship, possible *p*-values range from 0 to 1. Very small *p*-values, for example $p < .001$, would suggest a very strong evidence of a relationship (or rather against the null), while very large *p*-values, such as $p > .8$, would suggest a lack of any evidence of a relationship. Reducing an observed *p*-value, such as $p = .049$, to a result of 'significant' or 'not-significant' loses the depth of the information that this study can provide.

Results

Descriptive statistics for all predictor variables included in these models are presented in **Table 13** and **Table 14**.

Table 13

Descriptive Statistics of Continuous Predictor Variables

Variable	*N*	*M (SD)*	Min	Median (Q1, Q3)	Max	Possible range
Parental age	148	33.61 (9.27)	20	32.50 (27, 38.75)	62	18+
Parental depression	140	15.74 (10.90)	0	14.50 (6, 24)	47	0-63
Parenting stress	143	114.59 (19.33)	56	115 (103.50, 126)	157	36-180
Child behaviour (Problem)	148	24.61 (5.07)	15	25 (20, 29)	36	0-36
Social support	148	21.03 (55.98)	8	22 (17, 24)	34	8-40
Positive parenting (Problem)	146	4.38 (3.36)	0	4 (2, 6)	14	0-14
Physical punishment	147	4.22 (3.47)	0	4 (2, 6)	15	0-28
Emotional punishment	148	6.66 (4.37)	0	6 (3,9)	20	0-40
Non-violent discipline	147	6.42 (3.24)	0	6 (5, 8.50)	14	0-16
Household hunger level	148	5.26 (2.72)	0	6 (3, 7)	9	0-9

Table 14

Descriptive Statistics of Categorical Predictor Variables

Variable	*n*	*%*
Wave (N = 148)		
Wave 1	69	46.62
Wave 2	79	53.38
Facilitator pair (N = 148)		
Group led by Pair 1	78	52.70
Group led by Pair 2	70	47.30
Child age (N = 148)		
Younger (2-5 years)	66	44.60
Older (6-9 years)	82	55.40
Child sex (N = 148)		
Female	69	46.62
Male	79	53.38
Marital status (N = 148)		
Single	46	31.08
Partnered	102	68.92
Completed high school (N = 148)		
No	121	81.76
Yes	27	18.24
Experience of IPV (N = 147)		
No	96	64.86
Yes	51	34.46
Parental alcohol misuse (N = 148)		
No	99	66.89
Yes	49	33.11
Household employment (N = 148)	148	0.62
No	56	37.84
Yes	92	62.16
No. of health conditions (N = 143)		
0 conditions	57	38.51
1 condition	51	34.46
2 conditions	25	16.89
3 conditions	8	5.41
4 conditions	2	1.35
Type of health condition (N = 143)		
Asthma	21	14.69
Arthritis	10	7.00
Burn/Injury	10	7.00
Diabetes	2	1.40
Epilepsy	2	1.40
High blood pressure	27	18.88
HIV	46	32.17
Shingles	12	8.39
Stroke	3	2.10
Pneumonia/Bronchitis	3	2.10

Pairwise scatter plots did not reveal any strong relationships between continuous predictor variables. Spearman correlation coefficients supported this finding as they were all less than .60 (see **Table 15**). There were significant negative correlations between parenting stress and depression, parenting stress and child behaviour (problem), hunger level and emotional punishment, and social support and non-violent discipline. There were significant positive correlations between parental depression and child behaviour (problem), parental depression and parental age, parenting stress and parental age, number of health conditions and parental age, number of health problems and depression, number of health problems and social support, physical punishment and emotional punishment, positive parenting (problem) and child behaviour (problem), positive parenting and physical punishment, positive parenting and emotional punishment, and emotional punishment and non-violent discipline. The size of these significant correlations was weak to moderate (range: r = -.52 to .42).

Table 15

Correlation Matrix of Continuous Variables

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
1. Parental age	_____									
2. Parental depression	.20* [.04, .36]	_____								
3. Parenting stress	.19* [-.35, -.03]	-.52** [-.63, -.39]	_____							
4. Child behaviour (Problem)	.05 [-.11, .21]	.32** [.16, .46]	-.31** [-.45, -.15]	_____						
5. Social support	-.05 [-.21, .12]	.12 [-.05, .28]	-.05 [-.22, .11]	.09 [-.07, .25]	_____					
6. Positive parenting (Problem)	-.06 [-.22, .10]	.17 [.00, .33]	-.09 [-.25, .08]	.24 [.08, .39]	.10 [-.06, .26]	_____				
7. Physical punishment	.01 [-.16, .17]	.11 [-.05, .27]	-.19 [-.35, -.03]	-.03 [-.19, .13]	.06 [-.10, .22]	.24** [.08, .39]	_____			
8. Emotion punishment	-.15 [-.30, .01]	.06 [-.11, .22]	-.13 [-.28, .04]	.09 [.07, .25]	-.04 [-.20, .12]	.24** [.09, .39]	.42** [.28, .54]	_____		
9. Non-violent discipline	.11 [-.05, .27]	.06 [-.11, .22]	-.21 [-.36, -.05]	-.10 [-.25, .07]	-.17* [-.32, -.00]	-.15 [-.31, .01]	.12 [-.04, .28]	.23** [.07, .38]	_____	
10. Hunger level	-.03 [-.19, .13]	.14 [-.02, .30]	-.20 [-.36, -.04]	.08 [-.08, .24]	.06 [-.10, .22]	.06 [-.10, .22]	-.07 [-.23, .09]	-.19* [-.34, -.03]	-.16 [-.31, .00]	_____
11. No. of health conditions	.34** [.18, .47]	.24** [.07, .39]	-.05 [-.22, .11]	.02 [-.15, .18]	.18* [.02, .34]	.09 [-.07, .26]	.13 [-.04, .29]	.05 [-.11, .22]	.03 [-.14, .19]	-.07 [-.23, .09]

*Correlation is significant at the .05 level (two-tailed); **Correlation is significant at the .01 level (two-tailed).

Enrolment. Of the 148 participants that were allocated to the intervention group, 110 (74.32%) enrolled in the SCFP. Of these participants, 107 attended at least one group session, while three participants received only home visits. The latter were also considered enrolees as they had contacted the facilitators before the start of the programme to ask if they could have sessions at home, citing health reasons. It was noted, from facilitator reports, that just under half (n = 16; 42.11%) of the 38 non-enrolees became employed on a full-time basis between the baseline assessment and the start of the programme, and identified this as the reason for not enrolling. Most of these participants (n = 12; 75%) were from Wave 1. Other reasons for non-enrolment gathered by facilitators included: moving far from the study site (n = 5; 13.16%), having to care for a sick family member (n = 1; 2.63%), and beginning an internship programme (n = 1; 2.63%). There was no noted reason for non-enrolment for 13 participants.

Enrolment levels by variable categories for categorical variables and quartiles for continuous variables are presented in Table **16**. Quartiles present the spread of data by splitting the data into quarters, similarly to how the median splits data in half, and in fact the second quartile is the median (Field, 2009). There were no particularly large or concerning differences in the proportion enrolled by variable category or quartile. Where differences were seen, such as for Wave (69.57% of participants in Wave 1 were enrolees versus 78.48% of participants in Wave 2), the CIs were fairly wide relative to the differences, which indicates that the estimation is less precise.

Table 16

Enrolment Levels by Variable Categories

Variable	Category	Enrolled/total	Proportion enrolled [95% CI]
All	All	110/148	74.32 [66.50, 81.15]
Wave	Wave 1	48/69	69.57 [57.31, 80.08]
	Wave 2	62/79	78.48 [67.80, 86.94]
Facilitator	Group led by Pair 1	57/78	73.08 [61.84, 82.50]
	Group led by Pair 2	53/70	75.71 [63.99, 85.17]
Child age	Younger (2-5 years)	63/82	76.83 [66.20, 85.44]
	Older (6-9 years)	47/66	71.21 [58.75, 81.70]
Child sex	Female	54/69	78.26 [66.69, 87.29]
	Male	56/79	70.89 [59.58, 80.57]
Marital status	Single	74/102	72.55 [62.82, 80.92]
	Partnered	36/46	78.26 [63.64, 89.05]
Completed high school	No	91/121	75.21 [66.54, 82.60]
	Yes	19/27	70.37 [49.82, 86.25]
Experience of IPV	No	69/96	71.88 [61.78, 80.58]
	Yes	40/51	78.43 [64.68, 88.71]
Parental alcohol misuse	No	77/99	77.78 [68.31, 85.52]
	Yes	33/49	67.35 [52.46, 80.05]
Household employment	No	42/56	75.00 [61.63, 85.61]
	Yes	68/92	73.91 [63.71, 82.52]
No. of health conditions	0 conditions	37/57	64.91 [51.13, 77.09]
	1 condition	42/51	82.35 [69.13, 91.60]
	2 conditions	19/25	76.00 [54.87, 90.64]
	3 conditions	6/8	75.00 [34.91, 96.81]
	4 conditions	2/2	100.00 [15.81, 100]
Parental age	Q1 [20, 27)	33/44	75.00 [59.66, 86.81]
	Q2 (27, 32.5)	22/30	73.33 [54.11, 87.72]
	Q3 (32.5, 38.2)	28/37	75.68 [58.80, 88.23]
	Q4 (38.2, 62)	27/37	72.97 [55.88, 86.21]
Parental depression	Q1 [0, 6.0)	25/38	65.79 [48.65, 80.37]
	Q2 (6, 14.5)	25/32	78.12 [60.03, 90.72]
	Q3 (14.5, 24)	30/40	75.00 [58.80, 87.31]
	Q4 (24, 47)	25/30	83.33 [65.28, 94.36]
Parenting stress	Q1 [56, 104)	25/36	69.44 [51.89, 83.65]
	Q2 (104, 115)	29/37	78.38 [61.79, 90.17]
	Q3 (115, 126)	29/35	82.86 [66.35, 93.44]
	Q4 (126, 157)	23/35	65.71 [47.79, 80.87]
Child behaviour (Problem)	Q1 [15, 20)	25/39	64.10 [47.18, 78.80]
	Q2 (20, 25)	31/41	75.61 [59.70, 87.64]
	Q3 (25, 29)	34/42	80.95 [65.88, 91.40]
	Q4 (29, 36)	20/26	76.92 [56.35, 91.03]

Table 16 (Continued)

Enrolment Levels by Variable Categories

Variable	Category	Enrolled/total	Proportion enrolled [95% CI]
Social Support	Q1 [8, 17)	27/39	69.23 [52.43, 82.98]
	Q2 (17, 22)	35/48	72.92 [58.15, 84.72]
	Q3 (22, 24)	19/25	76.00 [54.87, 90.64]
	Q4 (24, 34)	29/36	80.56 [63.98, 91.81]
Positive Parenting	Q1 [0, 2)	42/59	71.19 [57.92, 82.24]
	Q2 (2,4)	24/28	85.71 [67.33, 95.97]
	Q3 (4, 6)	19/24	79.17 [57.85, 92.87]
	Q4 (6, 13)	23/35	65.71 [47.79, 80.87]
Physical punishment	Q1 [0, 2)	48/67	71.64 [59.31, 81.99]
	Q2 (2, 3)	8/11	72.73 [39.03, 93.98]
	Q3 (3, 6)	34/40	85.00 [70.16, 94.29]
	Q4 (6, 14)	19/29	65.52 [45.67, 82.06]
Emotional punishment	Q1 [0, 3)	38/49	77.55 [63.38, 88.23]
	Q2 (3, 6)	24/29	82.76 [64.23, 94.15]
	Q3 (6, 9)	29/39	74.36 [57.87, 86.96]
	Q4 (9, 22)	19/31	61.29 [42.19, 78.15]
Non-violent discipline	Q1 [0, 4)	38/49	77.55 [63.38, 88.23]
	Q2 (4, 5)	15/25	60.00 [38.67, 78.87]
	Q3 (5, 8)	32/40	80.00 [64.35, 90.95]
	Q4 (8, 14)	24/33	72.73 [54.48, 86.70]
Household hunger level	Q1 [0, 3)	25/40	62.50 [45.80, 77.27]
	Q2 (3, 6)	53/67	79.10 [67.43, 88.08]
	Q3 (6, 7)	6/7	85.71 [42.13, 99.64]
	Q4 (7, 9)	26/34	76.47 [58.83, 89.25]

Results of the univariable regression analyses, which included one predictor at a time, are presented as estimated ORs in the left-hand columns of Table **17**. The results showed that there was strong evidence that emotional punishment was a predictor of enrolment, with the *p*-value being .02. The OR of 0.91 (95% CI [0.84, 0.99]) indicates that for a one-unit increase in the emotional punishment score, there is a 9% decrease in the odds of enrolling.

Considering the *p*-value of .08, there appears to be moderate evidence that parents who report a higher number of challenging child behaviours as problematic to them are more like to enrol in the SCFP. A one-unit increase in the ECBI Problem

score increases the odds of enrolling by 7% (95% CI [0.99, 1.15]). There is weak evidence that enrolment increases with lower alcohol misuse (OR = 0.59, 95% CI [0.28, 1.26], p = .17), a higher number of health problems (OR = 1.38, 95% CI [0.90, 2.12], p = .14), and a higher level of depression (OR = 1.03, 95% CI [0.99, 1.06], p = .19). All other p-values were above .20 indicating no evidence of an impact on enrolment.

When all of the predictors were included in the multivariable regression (N = 130 due to listwise deletion), some of them emerged as strongly associated with enrolment. The results are presented alongside the results of the univariable regression in Table **17**. They indicate that a lower level of parenting stress increased the odds of enrolling – specifically, a one-unit increase in the Parenting Stress Index/Short Form increased the odds of enrolling by 5% (OR = 1.05; 95% CI [1.01, 1.09], p = .01). Physical and emotional punishment techniques, as measured by the ICAST-P, were also strong predictors of enrolment. Regarding physical punishment, a one-unit increase led to an 18% increase in the odds of enrolling (OR = 1.25, 95% CI [1.04, 1.50], p = .02). For emotional punishment, on the other hand, a one-unit increase led to a 14% decrease in the odds of enrolling (OR = 0.86, 95% CI [0.75, .97], p = .02).

Three predictors – household hunger, non-violent discipline, and the number of problematic child behaviours – appeared to be moderately associated with enrolment. P-values for these variables were .06, .07, and .08, respectively. A one-unit increase in household hunger increased the odds of enrolling by 21% (OR = 1.21 [0.99, 1.48]), a one-unit increase in the ICAST-P non-violent discipline subscale increased the odds of enrolling by 17% (OR = 1.17, 95% CI [0.99, 1.38]), while a one-unit increase in

the ECBI Problem score increased the odds of enrolling by 11% (OR = 1.11, 95% CI [0.99, 1.24]).

With *p*-values ranging from .10 to .14, there appeared to be weak evidence that Wave (OR = 2.60, 95% CI [0.83, 8.21], *p* = .10), marital status (OR = 2.91, 95% CI [0.81, 10.40], *p* = .10), level of depression (OR = 1.05, 95% CI [0.99, 1.11], *p* = .11), number of health conditions (OR = 1.63, 95% CI [0.86, 3.10], *p* = .14), and completing high school impacted enrolment (OR = 0.34, 95% CI [0.09, 1.27], *p* = .11). In terms of direction, being in Wave 2, being partnered, and having a higher level of depression increased the odds of enrolling, while having completed high school appeared to decrease the odds of enrolling. All other variables entered into the model had *p*-values of greater than .20, which indicates that there is likely no evidence of a relationship between them and enrolment.

The appropriateness of all univariable and multivariable models discussed above were confirmed through model diagnostics. The residual plots in Appendix P did not identify any failure of assumptions or model misfit. When compared to a model with no fixed effects, the *p*-value was .08. This value indicates that there is evidence of some associations between predictor variables and enrolment. The *p*-value of the Hosmer-Lemeshow test was 0.75, providing no evidence of lack of model fit. The variance inflation factors were no greater than 2.54, which is safely below thresholds typically used to diagnose multicollinearity problems (O'Brien, 2007).

Table 17

Enrolment: Estimate ORs for Univariable and Multivariable Regression

Variable	Univariable Regression Adjusted OR [95% CI]	*p*	Multivariable Regression Unadjusted OR [95% CI]	*p*
Wave (Wave 1 to Wave 2)	1.60 [0.76, 3.35]	.22	2.60 [0.83, 8.21]	.10
Facilitator (Group led by Pair 1 to Group led by Pair 2)	1.15 [0.55, 2.41]	.71	1.31 [0.48, 3.58]	.60
Child age (Younger to Older)	0.75 [0.36, 1.56]	.44	0.92 [0.33, 2.57]	.88
Child sex (Female to Male)	0.68 [0.32, 1.43]	.31	0.58 [0.21, 1.56]	.28
Marital status (Single to Partnered)	1.36 [0.60, 3.11]	.46	2.91 [0.81, 10.40]	.10
Completed high school (No to Yes)	0.78 [0.31, 1.97]	.60	0.34 [0.09, 1.27]	.11
Experience of IPV (No to Yes)	1.42 [0.64, 3.17]	.39	0.76 [0.23, 2.59]	.66
Parental alcohol misuse (No to Yes)	0.59 [0.28, 1.26]	.17	0.64 [0.21, 2.01]	.45
Household employment (No to Yes)	0.94 [0.44, 2.03]	.88	1.10 [0.40, 3.06]	.85
Parental age	1.01 [0.97, 1.05]	.72	0.97 [0.91, 1.05]	.45
Parental depression	1.03 [0.99, 1.06]	.19	1.05 [0.99, 1.11]	.11
Parenting stress	1.01 [0.99, 1.03]	.48	1.05 [1.01, 1.09]	.01
Child behaviour (Problem)	1.07 [0.99, 1.15]	.08	1.11 [0.99, 1.24]	.08
Social support	1.02 [0.96, 1.09]	.44	1.01 [0.93, 1.10]	.87
Positive parenting (Problem)	0.98 [0.88, 1.10]	.77	0.90 [0.76, 1.07]	.22
Physical punishment	1.01 [0.90, 1.12]	.91	1.25 [1.04, 1.50]	.02
Emotional punishment	0.91 [0.84, 0.99]	.02	0.86 [0.75, 0.97]	.02
Non-violent discipline	1.00 [0.90, 1.11]	.99	1.17 [0.99, 1.38]	.07
Household hunger level	1.09 [0.95, 1.24]	.24	1.21 [0.99, 1.48]	.06
No. of health conditions	1.38 [0.90, 2.12]	.14	1.63 [0.86, 3.10]	.14

Note. For categorical variables, the impact of change is always with respect to the reference category, which is in parentheses next to the variable name. For continuous variables, it is always reported based on a one-unit increase in the variable.

In the results above, in the unadjusted OR models, only a few variables appeared to be associated with enrolment. However, in the adjusted OR model, many *p*-values were small. The point estimates changed by up to 113%, and *p*-values also varied substantially, when moving from unadjusted to adjusted ORs. Because of this, the stability of results was further explored through three sensitivity analyses, which are presented in Table **18**. Although a controversial approach for predictor selection, stepwise model selection using the Akaike Information Criterion (Akaike, 1998) was implemented, allowing for forward selection and backward selection. Also, observations that were shown to have high leverage according to their hat values were removed from the dataset.

Three key findings can be drawn from the sensitivity analyses. Firstly, in all of the adjusted OR models (i.e., the multivariable regression model and the sensitivity analysis models), lower levels of emotional punishment and higher levels of physical punishment consistently appear to be most clearly related to participants' enrolling in the SCFP, with estimated ORs remaining similar. In the forward selection model, they are chosen as the only predictors of enrolment. In the backward selection model, the predictors highlighted in the original results are all included in the model, except for Wave – leaving a large number of variables that could potentially play a role. The estimated ORs for Wave and marital status are consistently particularly large (OR for Wave ranges from 2.33 to 2.60, and marital status 2.17 to 3.34) with large CIs.

Table 18
Enrolment: Unadjusted and Adjusted ORs and ORs from Sensitivity Analyses

	Unadjusted OR		Adjusted ORs		Stepwise selection (forward)		Stepwise selection (backward)		Excluding high-leverage observations	
Variable	OR [95% CI]	*p*	OR [95% CI]	*p*	OR [95% CI]	*p*	OR [95% CI]	*p*	OR [95% CI]	*p*
Wave (Wave 1 to Wave 2)	1.60 [0.76, 3.35]	.22	2.60 [0.83, 8.21]	.10					2.33 [0.73, 7.45]	.15
Facilitator Pair (Pair 1 to Pair 2)	1.15 [0.55, 2.41	.71	1.31 [0.48, 3.58]	.60					1.49 [0.52, 4.22]	.46
Child age (Younger to Older)	0.75 [0.36, 1.56]	.44	0.92 [0.33, 2.57]	.88					0.92 [0.32, 2.63]	.88
Child sex (Female to Male)	0.68 [0.32, 1.43]	.31	0.58 [0.21, 1.56]	.28					0.58 [0.21, 1.61]	.30
Marital status (Single to Partnered)	1.36 [0.60, 3.11]	.46	2.91 [0.81, 10.40]	.10			2.17 [0.78, 6.03]	.14	3.34 [0.91, 12.36]	.07
Completed high school (No to Yes)	0.78 [0.31, 1.97]	.60	0.34 [0.09, 1.27]	.11			0.32 [0.10, 1.04]	.06	0.27 [0.07, 1.03]	.05
Experience of IPV (No to Yes)	1.42 [0.64, 3.17]	.39	0.76 [0.23, 2.59]	.66					0.55 [0.15, 2.08]	.38
Parental alcohol misuse (No to Yes)	0.59 [0.28, 1.26]	.1	0.64 [0.21, 2.01]	.4					0.67 [0.21, 2.16	.50
Employment (No to Yes)	0.94 [0.44, 2.03]	.88	1.10 [0.40, 3.06]	.85					0.96 [0.32, 2.84]	.94
Parental age	1.01 [0.97, 1.05]	.72	0.97 [0.91, 1.05]	.45					0.95 [0.88, 1.02]	.16
Parental depression	1.03 [0.99, 1.06]	.19	1.05 [0.99, 1.11]	.11			1.04 [0.99, 1.10]	.10	1.05 [0.99, 1.13]	.12
Parenting stress	1.01 [0.99, 1.03]	.48	1.05 [1.01, 1.09]	.01			1.05 [1.01, 1.08]	.01	1.05 [1.00, 1.10]	.04
Child behaviour (Problem)	1.07 [0.99, 1.15]	.08	1.11 [0.99, 1.24]	.08			1.08 [0.98, 1.19]	.13	1.09 [0.97, 1.22]	.15
Social support	1.02 [0.96, 1.09]	.44	1.01 [0.93, 1.10]	.87					1.01 [0.93, 1.11]	.76
Positive parenting (Problem)	0.98 [0.88, 1.10]	.77	0.90 [0.76, 1.07]	.22					0.91 [0.76, 1.09]	.29
Physical punishment	1.01 [0.90, 1.12]	.91	1.25 [1.04, 1.50]	.02	1.14 [0.98, 1.32]	.09	1.23 [1.04, 1.46]	.02	1.28 [1.05, 1.57]	.01
Emotional punishment	0.91 [0.84, 0.99]	.02	0.86 [0.75, 0.97]	.02	0.87 [0.79, 0.97]	.01	0.86 [0.77, 0.97]	.01	0.87 [0.76, 0.99]	.03
Non-violent discipline	1.00 [0.90, 1.11]	.99	1.17 [0.99, 1.38]	.07			1.12 [0.97, 1.30]	.14	1.17 [0.98, 1.41]	.09
Household hunger level	1.09 [0.95, 1.24]	.24	1.21 [0.99, 1.48]	.06			1.19 [0.99, 1.42]	.06	1.19 [0.97, 1.46]	.09
No. of health conditions	1.38 [0.90, 2.12]	.14	1.63 [0.86, 3.10]	.14					1.91 [0.96, 3.79]	.06

Attendance. Enrolees attended an average of 8.38 (*SD* = 3.01) sessions or 69.83% of the programme. This figure is made up of 7.55 (*SD* = 3.48) group sessions and 0.84 (*SD* = 1.43) home visits. When including non-enrolees, the overall attendance rate decreases to 6.34 sessions (*SD* = 4.36) – with an average of 5.61 (*SD* = 4.46) group sessions attended and 0.73 (*SD* = 1.30) home visits received. In total, enrolees attended 830 out of a possible 1,320 group sessions and received 92 home visits. These figures translate to 70% of attended sessions having been completed in the group format and 10% via home visits. Twenty-two enrolees (20%) were characterised as programme dropouts - defined for our purposes as participants who missed three consecutive sessions (including the last three sessions) and did not return to the programme. There were more dropouts from Wave 2 than Wave 1 (*n* = 13 vs *n* = 9).

The frequency of participants who attended different numbers of sessions is shown in Table **19** below. Overall attendance was fairly consistent across the 12 sessions, although there were some fluctuations (see Table **20**). Session 11 has the lowest overall attendance (50.91%), while Session 5 (79.10%) has the highest overall attendance. The highest attendance at a group session was at Session 12 (76.36%) – this may be because facilitators told participants weeks in advance that this session would be celebratory, and include prize-giving, a special meal, and an opportunity to bring their children with them to celebrate. There is a peak in the number of home visits at Session 6 and 7, and then they taper off towards the end of the intervention.

Table 19

Frequency of Participant Attendance at 1 to 12 Sessions (N = 110)

Number of Sessions	Number of participants (%)
1 session	9 (8.18)
2 sessions	9 (8.18)
3 sessions	3 (2.73)
4 sessions	5 (4.55)
5 sessions	7 (6.36)
6 sessions	4 (3.64)
7 sessions	7 (6.36)
8 sessions	13 (11.82)
9 sessions	18 (16.36)
10 sessions	13 (11.82)
11 sessions	18 (16.36)
12 sessions	15 (13.64)

Table 20

Attendance by Group Session and Home Visit for Enrolled Parents (N = 110)

Session No.	Session Topic	Group session (*n*; %)	Home visits (*n*; %)	Overall attendance (*n*; %)
Session 1	Quality time with you and your child	70 (63.64)	12 (10.91)	82 (74.55)
Session 2	Quality time with your child: Say what you see	69 (62.73)	9 (8.18)	78 (70.91)
Session 3	Quality time with your child: Naming feelings	67 (60.91)	9 (8.18)	76 (69.09)
Session 4	Praising our children	74 (67.27)	8 (7.27)	82 (74.55)
Session 5	Rewards	80 (72.73)	7 (6.36)	87 (79.09)
Session 6	Giving clear and positive instructions to our children	62 (56.36)	15 (13.64)	77 (70)
Session 7	Keeping our children safe: Household rules	63 (57.27)	13 (11.82)	76 (69.09)
Session 8	Ignoring difficult behaviours	68 (61.82)	4 (3.64)	72 (65.45)
Session 9	5-minute cool down: Supporting household rules	68 (61.82)	7 (6.36)	75 (68.18)
Session 10	5-minute cool down: Support to follow instructions	73 (66.36)	4 (3.64)	77 (70)
Session 11	Consequences and problem-solving	52 (47.27)	4 (3.64)	56 (50.91)
Session 12	Reflection and moving on	84 (76.36)	0 (0)	84 (76.36)

Attendance levels by variable categories for categorical variables and quartiles for continuous variables are presented in Table **21**.

Table 21
Attendance Levels by Variable Categories

Variable	Category	*N*	*M (SD)*	Min	Median (Q1, Q3)	Max
Wave	Wave 1	48	8.56 (2.95)	1	9 (7, 11)	12
	Wave 2	62	8.24 (3.08)	1	9 (6, 11)	12
Facilitator pair	Group led by Pair 1	57	8.23 (3.21)	1	9 (6, 11)	12
	Group led by Pair 2	53	8.55 (2.80)	1	9 (7, 11)	12
Child age	Younger child	63	7.94 (3.44)	1	9 (5, 11)	12
	Older child	47	8.98 (2.22)	4	9 (8, 11)	12
Child sex	Female	54	8.87 (2.88)	1	9 (8, 11)	12
	Male	56	7.91 (3.08)	1	9 (5, 10.25)	12
Marital status	Single	74	8.57 (2.94)	1	9 (7, 11)	12
	Partnered	36	8.00 (3.16)	1	9 (6.50, 11)	12
Completed high school	No	91	8.55 (2.90)	1	9 (7, 11)	12
	Yes	19	7.58 (3.47)	1	9 (5, 10)	12
Experience of IPV	No	69	8.28 (2.98)	1	9 (7, 11)	12
	Yes	40	8.48 (3.08)	1	9 (7, 11)	12
Parental alcohol misuse	No	77	8.58 (2.92)	1	9 (7, 11)	12
	Yes	33	7.91 (3.21)	2	9 (5, 11)	12
Household employment	No	42	8.93 (2.79)	1	9 (8, 11)	12
	Yes	68	8.04 (3.11)	1	9 (6, 11)	12
No. of health conditions	0 conditions	37	8.43 (2.47)	1	9 (7, 10)	12
	1 condition	42	8.10 (3.33)	2	9 (5, 11)	12
	2 conditions	19	9.42 (2.83)	1	11 (8, 11)	12
	3 conditions	6	7.67 (3.39)	2	8,5 (6.50, 9)	12
	4 conditions	2	10.00 (2.83)	8	10 (9,11)	12
Parental age	Q1 [20, 27]	33	8.24 (3.03)	1	9 (7, 10)	12
	Q2 (27, 32.5]	22	7.73 (3.17)	2	8.50 (6, 10.75)	12
	Q3 (32.5, 38.3]	28	8.82 (2.88)	1	9 (8, 11)	12
	Q4 (38.3, 62]	27	8.63 (3.05)	1	9 (7.50, 11.50)	12
Parental depression	Q1 [0, 7]	27	8.56 (3.12)	2	10 (7, 11)	12
	Q2 (7, 16]	31	7.73 (2.56)	3	8 (6, 10)	12
	Q3 (16, 24]	22	8.27 (3.33)	1	9 (6.25, 11)	12
	Q4 (24, 47]	25	8.72 (3.40)	1	9 (8, 11)	12
Parenting stress	Q1 [55, 104]	27	8.07 (3.25)	1	9 (7, 11)	12
	Q2 (104, 115]	27	8.93 (2.34)	3	9 (8, 10.50)	12
	Q3 (115, 125]	26	8.77 (3.27)	2	10 (5.75, 11)	12
	Q4 (125, 157]	26	7.46 (3.15)	2	8 (5, 10)	12
Child behaviour (Problem)	Q1 [14, 21.2]	28	8.18 (2.67)	2	8.50 (7, 10)	12
	Q2 (21.2, 25]	28	8.68 (3.02)	2	10 (7.75, 11)	12
	Q3 (25, 29]	34	9.00 (3.18)	1	10.50 (7.25, 11.75)	12
	Q4 (29, 36]	20	7.20 (3.00)	1	8 (5.75, 9)	12
Social support	Q1 [7, 18]	31	8.90 (2.66)	2	9 (8, 11)	12
	Q2 (18, 22]	31	8.13 (3.27)	1	9 (6.50, 11)	12
	Q3 (22, 25]	27	8.44 (2.90)	2	9 (6.50, 11)	12
	Q4 (25, 34]	21	7.90 (3.32)	1	9 (5, 10)	12

Table 21 (Continued)
Attendance Levels by Variable Categories

Variable	Category	*N*	*M (SD)*	Min	Median (Q1, Q3)	Max
Positive parenting	Q1 [0, 2]	42	7.90 (3.35)	1	9 (5.25, 10.75)	12
	Q2 (2,3]	24	7.92 (2.83)	2	9 (7.50, 10)	12
	Q3 (3,6]	19	9.26 (2.56)	5	10 (7, 11)	12
	Q4 (6,14]	23	8.91 (2.92)	2	9 (7.50, 11.50)	12
Physical punishment	Q1 [0,2]	48	8.50 (2.76)	1	9 (7, 10.25)	12
	Q2 (2,3]	8	8.25 (4.17)	2	10 (5.75, 11.25)	12
	Q3 (3,6]	34	7.59 (3.26)	1	8 (5, 10.75)	12
	Q4 (6,14]	19	9.53 (2.48)	3	10 (9, 11)	12
Psychological disicipline	Q1 [0, 2]	38	8.13 (2.83)	1	8 (6.25, 10)	12
	Q2 (2, 3]	18	7.56 (3.17)	2	8.50 (5, 9)	12
	Q3 (3, 6]	30	8.87 (2.90)	2	9 (8, 11)	12
	Q4 (6, 14]	24	8.79 (3.31)	1	10 (7.75, 11)	12
Non-violent disicpline	Q1 [0, 4]	38	8.00 (2.73)	2	8.50 (5.25, 10)	12
	Q2 (4, 6]	23	9.43 (2.35)	3	10 (8.50, 11)	12
	Q3 (6, 8]	24	7.96 (3.80)	1	8.50 (5.75, 11.25)	12
	Q4 (8, 14]	24	8.29 (3.06)	1	9 (7.75, 10.25)	12
Household hunger level	Q1 [0,3]	33	7.88 (3.26)	1	8 (6, 11)	12
	Q2 (3,6]	45	8.29 (2.89)	2	9 (7, 10)	12
	Q3 (6,7]	6	10.17 (2.14)	6	11 (10.25, 11)	12
	Q4 (7,9]	26	8.77 (3.01)	1	9 (7.25, 11)	12

In terms of the relationship between attendance and each of the individual predictors (i.e., univariable regression), the relevant ORs are presented in the left-hand column of Table **22**. While there appears to be no particularly strong relationships between predictor variables and attendance, there is some evidence that being the parent of a male child, rather than a female child, increased the odds of missing a session. The *p*-value for this relationship is .08, with the OR of 1.69 (95% CI [0.93, 3.06]) indicating that being a parent of a male child increased one's odds of missing a session by 69%. Although the *p*-values are above .10, there may be weak evidence that having someone employed in the household (OR = 1.64, 95% CI [0.89, 3.03], $p = .12$), being a parent of an older child (OR = 0.61, 95% CI [0.33, 1.11], $p = .10$), being an older parent (OR = 0.98, 95% CI [0.95, 1.01], $p = .14$), and having a greater household hunger level (OR = 0.92, 95% CI [0.82, 1.04], $p = .19$), decreased the odds of missing a session.

Compared to a model with no predictors, the *p*-value was .46. This value suggests that there is no or little evidence of associations between predictors and attendance. Nevertheless, the effect sizes with the lowest *p*-values are briefly discussed below. The results of the multivariable regression model, which included only 97 participants due to listwise deletion, are shown in the right-hand column of Table **22**. With a *p*-value of .07, there appears to be moderate evidence that having completed high school increases the odds of missing a session by 124% (OR = 2.24, 95% CI [0.93, 5.39]). Although weaker, with *p*-values of .12 and .16, emotional punishment use and parents' perception of practicing positive parenting as problematic may play some role in whether parents miss sessions. In relation to the former, a unit increase in ICAST-P psychological discipline score decreased the odds of missing a session by 8% (OR = 0.92, 95% CI [0.83, 1.02]), while a unit increase in PARYC positive parenting problem score decreased the odds of missing a session by 8% (OR = 0.92, 95% CI [0.81, 1.04]).

While the *p*-values for the fixed effects were large, there were some interesting results regarding the random effects. While the model was not able to detect a group effect (estimated SD of group random effect = 0), there was a large participant random effect (estimated SD of participant random effect = 1.26). This finding indicates that factors related to the individual, which are not captured by the included variables, played a central role in whether or not a participant missed a session. Any potential group effect was overshadowed by this variability.

The appropriateness of all univariable and multivariable models for attendance were cofirmed through model diagnostics. The residual and random effects plots in Appendix Q did not identify any failure of assumptions or model misfit.

Table 22

Attendance: Estimate ORs for Univariable and Multivariable Regression

	Univariable Regression		Multivariable Regression	
Variable	Unadjusted OR [95% CI]	*p*	Adjusted OR [95% CI	*p*
Wave (Wave 1 to Wave 2)	1.17 [0.64, 2.14]	.62	1.44 [.65, 3.18]	.37
Facilitator pair (Pair 1 to Pair 2)	0.89 [0.49, 1.62]	.70	0.75 [.36, 1.46]	.40
Child age (Younger to Older)	0.61 [0.33, 1.11]	.10	0.73 [0.37, 1.44]	.36
Child sex (Female to Male)	1.69 [0.93, 3.06]	.08	1.48 [0.76, 2.87]	.25
Marital status (Single to Partnered)	1.38 [0.73, 2.60]	.32	1.74 [0.80, 3.78]	.16
Completed high school (No to Yes)	1.65 [0.75, 3.62]	.21	2.24 [0.93, 5.39]	.07
Experience of IPV (No to Yes)	0.94 [0.51, 1.75]	.85	0.93 [0.44, 1.97]	.85
Parental alcohol misuse (No to Yes)	1.39 [0.72, 2.66]	.32	1.62 [0.79, 3.35]	.19
Household employment (No to Yes)	1.64 [0.89, 3.03]	.12	1.25 [0.61, 2.57]	.54
Parental age	0.98 [0.95, 1.01]	.14	0.97 [0.93, 1.02]	.25
Parental depression	1.00 [0.97, 1.03]	.94	0.99 [0.96, 1.03]	.62
Parenting stress	1.01 [0.99, 1.02]	.54	0.99 [0.97, 1.02]	.53
Child behaviour problems (Problem)	1.02 [0.96, 1.09]	.45	1.05 [0.97, 1.13]	.26
Social support	1.03 [0.97, 1.08]	.35	1.04 [0.98, 1.10]	.24
Positive parenting (Problem)	0.96 [0.87, 1.06]	.44	0.92 [0.81, 1.04]	.16
Physical punishment	0.96 [0.88, 1.05]	.35	1.00 [0.89, 1.12]	.95
Emotional punishment	0.96 [0.88, 1.04]	.30	0.92 [0.83, 1.02]	.12
Non-violent discipline	1.00 [0.91, 1.09]	.95	1.03 [0.91, 1.15]	.66
Household hunger level	0.92 [0.82, 1.04]	.19	0.92 [0.81, 1.05]	.23
No. of health conditions	0.87 [0.63, 1.18]	.35	1.03 [0.68, 1.54]	.90

Note. For categorical variables, the impact of change is always with respect to the reference category, which is in parentheses next to the variable name. For continuous variables, it is always reported based on a one-unit increase in the variable.

Home practice. Since a participant needed to attend the programme to complete home practice, only the 110 enrolees were included in these analyses. To collect home practice data for a given session, participants had to attend any subsequent session in order to submit a form. Therefore, based on the recorded attendance, the expected number of home practice forms was 812. Of these, 25.49% were missing, which left 605 valid responses. Only four of these responses indicated that a participant had not attempted to do home practice (see Table **23** for the distribution of scores). The lack of zeros seemed unusual and raised concerns about whether the data was "missing not at random". Two possible reasons for the low frequency of zeros may be that participants did not want to submit a form when they had not completed their home practice, or that they thought that they were not required to submit a form when they had not attempted home practice. This type of missing data would be "missing not at random", a type of data that a mixed model cannot handle without further extension (Field, 2009). I, therefore, chose to exclude the four zero scores, and analyse only scores from one to seven – this left 601 valid responses to analyse. Implicit in this approach is a decision to model only the extent of home practice by those participants who had attempted to practice on at least one occasion for that session. I note that there are limitations to this analysis, which I elaborate on in the Discussion chapter (Chapter 9).

Table 23

Distribution of Home Practice Scores Among Enrolees (N = 812)

No. of days practiced	Frequency	%	Valid %
0	4	.49	.66
1	31	3.82	5.12
2	51	6.28	8.43
3	76	9.36	12.56
4	85	10.47	14.05
5	77	9.48	12.73
6	62	7.64	10.25
7	219	26.97	36.20
Missing	207	25.49	-
Total	812	100	100

Levels of home practice by variable category are presented in Table **24** below. Different participants contributed different numbers of home practice scores to the presented summary statistics. This clustering of data is not explicitly accounted for in these statistics, which serve simple to explore the relationships in the data and guide model choice, but is formally accounted for in the models.

Table 24

Home Practice Levels by Variable Categories

Variable	Category	*N*	*M (SD)*	Min	Median (Q1, Q3)	Max
Wave	Wave 1	285	4.84 (2.05)	1	5 (3, 7)	7
	Wave 2	316	5.10 (1.86)	1	5 (4, 7)	7
Facilitator pair	Group led by Pair 1	297	4.34 (1.96)	1	4 (3, 6)	7
	Group led by Pair 2	304	5.60 (1.72)	1	6 (4, 7)	7
Child age	Younger child (2-5)	340	5.12 (1.95)	1	6 (4, 7)	7
	Older child (6-9)	261	4.79 (1.94)	1	5 (3, 7)	7
Child sex	Female	334	4.82 (1.92)	1	5 (3, 7)	7
	Male	267	5.18 (1.97)	1	6 (4, 7)	7
Marital status	Single	414	4.85 (1.88)	1	5 (3, 7)	7
	Partnered	187	5.26 (2.06)	1	6 (3, 7)	7
Completed high school	No	510	4.98 (1.98)	1	5 (3, 7)	7
	Yes	91	4.93 (1.79)	1	5 (4, 7)	7
Experience of IPV	No	363	5.05 (1.91)	1	5 (4, 7)	7
	Yes	229	4.97 (1.96)	1	5 (3, 7)	7
Parental alcohol misuse	No	447	5.02 (1.98)	1	5 (3, 7)	7
	Yes	154	4.86 (1.86)	1	5 (4, 7)	7
Household employment	No	256	5.00 (1.89)	1	5 (3.75, 7)	7
	Yes	345	4.96 (2.00)	1	5 (3, 7)	7
No. of health conditions	0 conditions	194	5.54 (1.86)	1	7 (4, 7)	7
	1 condition	206	4.78 (1.80)	1	5 (3, 7)	7
	2 conditions	136	4.34 (2.13)	1	4 (2, 7)	7
	3 conditions	36	4.97 (1.84)	1	5 (4, 7)	7
	4 conditions	16	6.44 (0.89)	4	7 (6, 7)	7
Parental age	Q1 [20, 27]	167	4.92 (1.71)	1	5 (4, 7)	7
	Q2 (27, 33]	148	5.09 (1.97)	1	5 (4, 7)	7
	Q3 (33, 40]	151	5.04 (1.96)	1	5 (3, 7)	7
	Q4 (40, 62]	135	4.84 (2.19)	1	5 (3, 7)	7
Parental depression	Q1 [0, 7]	155	4.65 (2.00)	1	5 (3, 7)	7
	Q2 (7, 16]	153	5.36 (2.02)	1	6 (4, 7)	7
	Q3 (16, 24.50]	117	4.71 (1.97)	1	5 (3, 7)	7
	Q4 (24.50, 45]	142	5.25 (1.59)	1	5 (4, 7)	7
Parenting stress	Q1 [55, 106]	152	5.13 (1.76)	1	5 (4, 7)	7
	Q2 (106, 115]	141	5.33 (1.90)	1	6 (3, 7)	7
	Q3 (115, 125]	151	4.56 (1.92)	1	5 (3, 7)	7
	Q4 (125, 157]	130	4.99 (2.06)	1	6 (3, 7)	7
Child behaviour (Problem)	Q1 [14, 21]	156	5.02 (2.01)	1	5 (3, 7)	7
	Q2 (21, 25]	164	4.73 (2.01)	1	5 (3, 7)	7
	Q3 (25, 29]	206	5.07 (1.98)	1	6 (3.25, 7)	7
	Q4 (29, 36]	75	5.17 (1.53)	1	5 (4, 7)	7
Social support	Q1 [7, 17]	158	4.80 (1.88)	1	5 (3, 7)	7
	Q2 (17, 22]	182	5.18 (2.01)	1	6 (3, 7)	7
	Q3 (22, 25]	150	4.78 (1.93)	1	5 (3, 7)	7
	Q4 (25, 34]	111	5.16 (1.95)	1	6 (4, 7)	7

Table 24 (Continued)
Home Practice Levels by Variable Categories

Variable	Category	*N*	*M (SD)*	Min	Median (Q1, Q3)	Max
Positive parenting	Q1 [0, 2]	225	5.08 (2.04)	1	6 (3, 7)	7
	Q2 (2,4]	117	4.77 (1.88)	1	5 (3, 7)	7
	Q3 (4,6]	116	5.36 (1.70)	1	6 (4, 7)	7
	Q4 (6,13]	131	4.68 (2.03)	1	5 (3, 7)	7
Physical punishment	Q1 [0,0]	166	5.05 (1.95)	1	5.50 (3, 7)	7
	Q2 (0,3]	148	4.97 (1.93)	1	5 (4, 7)	7
	Q3 (3,6]	153	4.95 (1.91)	1	5 (3, 7)	7
	Q4 (6,14]	127	4.98 (2.00)	1	5 (3, 7)	7
Psychological disicipline	Q1 [0, 3]	199	5.01 (2.05)	1	6 (3, 7)	7
	Q2 (3, 6]	121	4.86 (1.96)	1	5 (3, 7)	7
	Q3 (6, 8]	143	5.20 (1.91)	1	6 (4, 7)	7
	Q4 (8, 17]	138	4.81 (1.83)	1	5 (3, 7)	7
Non-violent disicpline	Q1 [0, 4]	187	4.97 (1.92)	1	5 (3, 7)	7
	Q2 (4, 6]	145	5.06 (1.96)	1	5 (3, 7)	7
	Q3 (6, 8]	116	4.97 (2.01)	1	5 (3, 7)	7
	Q4 (8, 9]	144	4.81 (1.95)	1	5 (3, 7)	7
Household hunger level	Q1 [0,4]	168	4.83 (1.93)	1	5 (3, 7)	7
	Q2 (4,6]	240	5.17 (1.85)	1	6 (4, 7)	7
	Q3 (6,8]	82	5.76 (1.55)	1	6 (5, 7)	7
	Q4 (8,9]	111	4.21 (2.17)	1	4 (2.50, 7)	7

In the univariable regression presented in Table 23 below, there was strong evidence of an association between facilitator pair and the extent of home practice. Participants in a group facilitated by Facilitator 2 are 4.01 times more likely to have greater levels of home practice (OR = 4.01, 95% CI [1.92, 8.38], p = <.01). Also, parental depression was strongly associated with participants' level of home practice completion – as the depression score increases so does the odds of practising more (OR = 1.04, 95% CI [1.00, 1.08], p = .04). Considering the p-values of .14, the PARYC problem score (OR = 0.90, 95% CI [0.79, 1.03]) and marital status (OR = 1.88, 95% CI [0.81, 4.36]) appeared to be loosely associated with home practice completion, with parents who have lower problem scores and those who are partnered having greater odds of practising more.

Again, the adjusted ORs, which were generated via the multivariable regression model (N = 529 due to listwise deletion), are presented alongside the unadjusted ORs in Table 23.

When comparing this model to one with no fixed effects, the *p*-value is relatively large at .25. This value suggests that there is no evidence of a relationship between the predictors and the amount of home practice completed. The results of the multivariable regression are nonetheless presented below, as they may provide preliminary ideas to explore in future studies.

Table 25

Home Practice: Estimate ORs for Univariable and Multivariable Regression

Variable	Univariable Regression		Multivariable Regression	
	Unadjusted OR [95% CI]	*p*	Adjusted OR [95% CI]	*p*
Wave (Wave 1 to Wave 2)	1.46 [0.61, 3.51]	.40	0.97 [.52, 1.81]	.93
Facilitator pair (Pair 1 to Pair 2)	4.01 [1.92, 8.38]	<.01	3.24 [1.85, 5.67]	<.01
Child age (Younger to Older)	1.00 [0.48, 2.10]	.99	0.92 [0.51, 1.65]	.77
Child sex (Female to Male)	1.46 [0.72, 2.96]	.30	1.57 [0.88, 2.81]	.13
Marital status (Single to Partnered)	1.88 [0.81, 4.36]	.14	1.75 [0.93, 3.30]	.08
Completed high school (No to Yes)	1.10 [0.38, 3.16]	.86	1.03 [0.46, 2.31]	.94
Experience of IPV (No to Yes)	0.70 [0.31, 1.54]	.37	0.90 [0.49, 1.65]	.73
Parental alcohol misuse (No to Yes)	1.09 [0.49, 2.44]	.83	0.75 [0.40, 1.44]	.39
Household employment (No to Yes)	1.01 [0.49, 2.10]	.97	1.39 [0.77, 2.52]	.28
Parental age	0.99 [0.94, 1.04]	.75	1.00 [0.97, 1.03]	.94
Parental depression	1.04 [1.00, 1.08]	.04	1.01 [0.98, 1.04]	.58
Parenting stress	1.02 [0.99, 1.04]	.24	1.00 [0.98, 1.01]	.81
Child behaviour problems (Problem)	1.03 [0.94, 1.12]	.52	1.01 [0.95, 1.07]	.86
Social support	1.00 [0.95, 1.07]	.85	1.01 [0.96, 1.06]	.64
Positive parenting (Problem)	0.90 [0.79, 1.03]	.14	0.95 [0.86, 1.05]	.30
Physical punishment	1.05 [0.94, 1.19]	.36	1.00 [0.92, 1.08]	.94
Emotional punishment	0.98 [0.89, 1.07]	.61	0.98 [0.92, 1.06]	.68
Non-violent discipline	1.05 [0.93, 1.18]	.44	0.95 [0.87, 1.04]	.27
Household hunger level	0.95 [0.83, 1.09]	.48	0.98 [0.88, 1.09]	.70
No. of health conditions	0.89 [0.58, 1.35]	.57	0.84 [0.63, 1.14]	.26

Note. For categorical variables, the impact of change is always with respect to the reference category, which is in parentheses next to the variable name. For continuous variables, it is always reported based on a one-unit increase in the variable.

The results of the multivariable regression showed that facilitator pair remained strongly associated with practising homework, with a *p*-value of less than .01. The OR of 3.24 (CI [1.85, 5.67) indicated that parents in groups facilitated Facilitator Pair 2 were 3.24 times more likely to have a greater level of home practice completion that parents in groups facilitated by Facilitator Pair 1. There was a trend towards an association between marital status and home practice, with parents who were partnered having greater odds of increased practice (OR = 1.75, 95% CI [0.93, 3.30], $p = .08$). Child sex was weakly associated with home practice – being a parent of a male child increased the odds of greater practice by 57% (OR = 1.57, 95% CI [0.88, 2.81], $p = .13$).

The multivariable analysis included two random effects. The first allowed for each combination of session and group to uniquely impact home practice completion, and, independent of that, the second allowed for participant-specific behaviour. I explored the sensitivity of results to this model design by considering two alternatives, which are presented in Table **26**. One of these, Sensitivity Analysis 1, included session and group independently, and participant. The other, Sensitivity Analysis 2, included only one random effect, namely the combination of session, group, and participant. As a third sensitivity analysis - Sensitivity Analysis 3 - the zero scores were included, and a count from zero to seven was instead modelled – noting that we expect little impact as there are only four observations. There appears to be a greater number of low *p*-values in Sensitivity Analysis 2. However, the flexibility allowed may be too substantial because it precludes any type of group dynamic that would endure throughout the course of the intervention. Therefore, we looked at the other models – amongst these, being in a group facilitated by Facilitator Pair 2 and experiencing higher levels of depression were consistently associated with greater levels of home practice. One model, Sensitivity Analysis 1, showed a possible association between

marital status (being partnered) and positive parenting (identifying fewer problems) and greater home practice.

All relevant diagnostic and random effects plots for both the univariable and multivariable models are presented in Appendix R.

Table 26
Home Practice Model: Sensitivity Analyses

	Sensitivity Analysis 1		Sensitivity Analysis 2		Sensitivity Analysis 3	
Variable	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Wave (Wave 1 to Wave 2)	1.65 [0.61, 4.46]	.33	1.81 [1.10, 2.96]	.02	1.33 [0.63, 2.80]	.45
Facilitator pair (Pair 1 to Pair 2)	3.78 [1.53, 9.32]	<.01	4.66 [3.11, 6.97]	<.01	3.57 [1.92, 6.64]	<.01
Child age (Younger to Older)	1.24 [0.62, 2.46]	.54	0.69 [0.46, 1.05]	.09	1.01 [0.54, 1.89]	.98
Child sex (Female to Male)	1.26 [0.65, 2.45]	.49	1.31 [0.86, 2.01]	.21	1.45 [0.79, 2.67]	.23
Marital status (Single to Partnered)	2.21 [1.02, 4.81]	.05	2.28 [1.38, 3.77]	<.01	1.68 [0.82, 3.45]	.16
Completed high school (No to Yes)	0.96 [0.38, 2.45]	.93	0.95 [0.51, 1.78]	.88	1.06 [0.43, 2.62]	.89
Experience of IPV (No to Yes)	0.68 [0.33, 1.40]	.30	0.68 [0.43, 1.08]	.10	0.81 [0.40, 1.58]	.53
Parental alcohol misuse (No to Yes)	1.10 [0.53, 2.28]	.79	1.18 [0.72, 1.93]	.52	1.00 [0.50, 1,.99]	1.00
Household employment (No to Yes)	1.02 [0.53, 1.95]	.95	0.72 [0.48, 1.10]	.13	1.04 [0.56, 1.93]	.90
Parental age	0.98 [0.93, 1.03]	.39	1.00 [0.97, 1.03]	.98	0.99 [0.95, 1.04]	.77
Parental depression	1.03 [1.00, 1.07]	.08	1.05 [1.03, 1.07]	<.01	1.03 [1.00, 1.07]	.06
Parenting stress	1.02 [1.00, 1.05]	.11	1.01 [1.00, 1.03]	.09	1.02 [0.99, 1.04]	.20
Child behaviour problems (Problem)	1.05 [0.97, 1.14]	.22	1.01 [0.95, 1.06]	.76	1.02 [0.95, 1.06]	.51
Social support	1.00 [0.95, 1.06]	1.00	0.99 [0.95, 1.02]	.47	1.00 [0.95, 1.02]	.92
Positive parenting (Problem)	0.89 [0.79, 1.01]	.06	0.91 [0.84, .99]	.03	0.91 [0.82, 1.02]	.12
Physical punishment	1.08 [0.98, 1.20]	.14	1.04 [0.97, 1.11]	.30	1.04 [0.94, 1.15]	.45
Emotional punishment	0.98 [0.90, 1.07]	.67	1.01 [0.96, 1.07]	.69	0.98 [0.91, 1.06]	.65
Non-violent discipline	1.05 [0.94, 1.17]	.39	1.06 [0.99, 1.14]	.10	1.04 [0.94, 1.15]	.46
Household hunger level	0.97 [0.87, 1.10]	.68	0.95 [0.88, 1.02]	.17	0.97 [0.86, 1.08]	.56
No. of health conditions	1.01 [0.69, 1.48]	.95	0.92 [0.71, 1.19]	.51	0.94 [0.66, 1.35]	.72

Summary of results. To summarise this chapter, different predictors were related to parents enrolling in the SCFP, enrolees missing a session of the programme, and the level to which those who submitted a home practice form, completed their home practice. While emotional punishment was the only predictor shown to be strongly associated with enrolment in the univariable model, parenting stress, emotional punishment, and physical punishment were all shown to be strongly associated with this outcome in the multivariable model. There were no particularly strong associations between the included predictor variables and attendance (both in the univariable and multivariable models), but there was a substantial participant random effect. Facilitator pair appeared to be strongly associated with the level of home practice completion, both in the univariable and multivariable model. It is important to note again that findings from these models, and particularly the home practice model, should be interpreted with caution.

Chapter 7: Dose-Effect Models – Methods and Analysis

In the previous two chapters, qualitative and quantitative methods were used to gain an understanding of baseline factors that affected engagement in the SCFP during an efficacy trial of the intervention. This chapter now shifts towards a focus on how engagement, as measured by attendance, is associated with primary outcomes targeted by the SCFP. The methods used as well as the generated results are presented below.

Methods

The trial data was analysed using intention-to-treat and per protocol analysis – results are shown in Table 7 on page 56. The former provided an unbiased indication of the effect of the intervention when all randomised participants were included in the analysis (Montori & Guyatt, 2001). The per protocol analysis, while losing the benefit of randomisation, established the likely effect of the SCFP on certain outcomes for high attenders – i.e., those participants who attended seven or more sessions. Although the results were similar, the group of high attenders reported more favourable results at the post-test than the full intervention group included in the intention-to-treat analysis. Using self-report data, both sets of results showed that the full intervention group and high attenders, when compared to controls, used significantly more positive parenting and less psychological and physical punishment at post-test. Additionally, high attenders reported a significant decrease in the frequency of child behaviour problems, which was not the case for the full intervention group in the intention-to-treat analysis. For the observational assessments, both analysis approaches found a significant increase in positive parenting at both time-points and significant decreases in negative parenting in intervention versus control participants. Children of high attenders behaved significantly more positively than control group children at both the immediate post-test and one-year follow-up, in the observed tasks. In the intention-to-treat analysis, an increase in observed positive child behaviour was only seen at post-test.

While the intention-to-treat and per protocol analyses generate results on programme outcomes, they do not directly provide an indication of how the number of sessions attended impacts how parents and children respond to the intervention. This part of the study took the analysis further by more thoroughly quantifying the relationship between attendance and outcomes at post-test and one-year follow-up. These models included the entire trial sample (i.e., both the intervention and control arms) of 296 participants.

Variables.

Outcome variables. For this study, we chose to focus on the RCT's primary outcomes. I decided not to explore the relationships amongst the different outcomes, but to rather focus on the relationships between attendance and each of them. Therefore, each outcome was modelled separately. The modelled outcome variables included frequency of positive parenting use (PARYC Frequency Score), level at which parents saw their use of positive parenting as problematic (PARYC Problem Score), emotional punishment use (ICAST-P Psychological Discipline subscale), physical punishment use (ICAST-P Physical Discipline subscale), intensity of child behaviour problems (ECBI Intensity Score), level at which parents saw their children's behaviours as problematic (ECBI Problem Score), observed positive and negative parent behaviours (SOCS), and observed positive and negative child behaviours (SOCS).

A description of the measures used to collect the data was provided in the previous chapter. The only measure not outlined there is the SOCS (Mlotshwa, 2013), which was used to code the frequency of observed behaviours. This measure draws from the Dyadic Parent-Child Interaction Coding System (DPICS; Robinson & Eyberg, 1981), but was simplified for this study. Coded behaviours included positive parent behaviour (comprised of positive verbal and positive non-verbal behaviours), observed negative parent behaviour (comprised

of negative verbal behaviour, negative non-verbal behaviour, and observed negative command usage), observed positive child behaviour (comprised of positive verbal and positive non-verbal behaviour), and observed negative child behaviour (comprised of negative verbal and negative non-verbal behaviour).

Predictor variable. In each model, the number of sessions attended, which could range from 0 to 12, was included as a predictor of the outcome at post-test and at one-year follow-up. Participants in the control group were presumed to be indistinguishable from those in the intervention group who attended no sessions (i.e., both were recorded as having attended zero sessions).

Although the literature (i.e., Berkel et al., 2016; Chacko et al., 2016; Nix et al., 2009) suggests that quality of participation, including home practice completion, is also associated with programme outcomes, this variable was not included for several reasons. Firstly, with the inclusion of home practice, there would be an even greater number of parameters in an already stretched model, which would further decrease the statistical power of the analysis. Additionally, this would make the results more challenging to interpret. Also, as discussed in the previous chapter, there were concerns about the high percentage of missing values in the home practice completion data. Suggestions on how to collect data on quality of participation in future studies are presented in the Discussion chapter (Chapter 9).

Control variables. Wave, child age, child sex, and parental experience of IPV were independently included in the model as control variables in three distinct ways. Firstly, the mean outcome at any time could be impacted by these four variables – for example, parents who experienced IPV may have used harsher discipline techniques (Kelleher et al., 2008). Secondly, even in the absence of an intervention, there may have been a change in an outcome over time. Wave and IPV were allowed to impact this change (i.e., a two-way interaction effect). For example, one community (reflected by Wave) may be affected by a

spate of social problems that may affect their parenting. Thirdly, the impact of the number of sessions on the outcome at post-test and one-year might be moderated by Wave and experience of IPV (i.e., a three-way interaction effect) – this was of specific interest in this analysis.

To expand on the third point, wave was included as a possible moderator since there may be factors related to the two different field sites that may have impacted how participants responded to the intervention – for example, from the implementation team's subjective sense, there appeared to be a greater sense of learned helplessness in Site C than in Nyanga. Also, as mentioned earlier in this thesis, Nyanga is a more violent community than Khayelitsha and violence appeared to have a greater impact on the daily lives of these participants.

Regarding IPV, research indicates that parents who experience this type of abuse are more likely to use inconsistent and harsh parenting (Kelleher et al., 2008; Levendosky & Graham-Bermann, 2000; McGuigan & Pratt, 2001), which is associated with a greater risk for child behaviour problems (Moolla, 2012). It may be challenging for victims of IPV to implement new parenting skills in the home. Also, even if an abused parent implements new skills, improvements may not be seen in her child's behaviour due to the negative impact of witnessing violence in the home.

In the results, the dose-effect relationships are explored with and without the moderators described above.

Analysis. The analysis was conducted using generalised linear mixed models as they allowed all features of the data to be captured (McCulloch & Neuhaus, 2005). Firstly, they allow for flexibility in the distribution of the outcome. Based on the initial exploration of the distribution of the outcomes, normal, negative binomial, and Poisson distributions were used. For consistency, all of the models were all fitted using a log link – this type of link is

typically used for Poisson and negative binomial distributions because of its statistical properties and ease of interpretation. This choice of distributions and link functions were confirmed through model diagnostics.

Secondly, generalised linear mixed models were an appropriate choice because they take repeated measures or dependencies among observations into account through random effects – this was necessary since the RCT was longitudinal in nature (hence had repeated measures of the same participants) and also because the SCFP followed a group format. For this analysis, two levels of random effects were included in the models. The first level accounted for a group effect, while the second accounted for a participant effect. The group effect considered the possibility of each group's unique dynamic influencing the change over time for all participants in that group. In particular, the group average outcome could fluctuate above or below some population-level average. The participant effect allowed for unique characteristics of participants within groups. More specifically, the mean outcome for each participant was able to fluctuate around the group average.

The models were fitted using R Version 3.13 (R Core Team, 2013), specifically the GAMLSS (Stasinopoulos & Rigby, 2007) and glmmPQL packages (Venables & Ripley, 2002). These packages fit the models using maximum likelihood and penalised quasi-likelihood approaches, respectively. The assessment of model fit and appropriateness of assumptions was assessed visually using histograms of model residuals and scatterplots of residuals against fitted outcomes. These plots are presented in Appendix S. Due to little missing data, the five sets of plots based on the five imputed datasets were very similar. Therefore, only one set is shown as a representation.

For each of the two time-points, effect sizes are reported as the multiplicative change in the mean response for each additional session. Reported 95% CIs and *p*-values were based on the normal approximation for the estimated model parameters, and Rubin's rules (Rubin,

2004) were applied to combine the imputed datasets. Two models were fitted to the data – one which included no moderators, and one which included wave and experience of IPV as moderators. The latter essentially captured four different types of participants – those in Wave 1 who had not experienced IPV in the past month, those in Wave 1 who had experienced IPV in the past month, those in Wave 2 who had not experienced IPV in the past month, and those in Wave 2 who had experienced IPV in the past month. Due to the large number of results to report, only those that indicate a strong association between attendance and SCFP outcomes at either time-point will be discussed, with the choice of what to discuss being based on small *p*-values ($p < .05$). However, all *p*-values are presented in tables for perusal – an explanation of how to interpret the contents of the table is provided with the first outcome presented in the Results. Only the estimates of interest are presented in the Results, while the full set of estimated model parameters are included in Appendix T.

In addition to the effect sizes, figures illustrating the multiplicative change in mean outcome over time, for participants who attended 0 to 12 sessions, are presented. Separate figures are presented for changes from baseline to post-test and from baseline to one-year follow-up. Due to the inclusion of moderators, participants have been split into four groups, which are indicated by differed coloured lines:

- Black: participants in Wave 1 who have not experienced IPV.
- Green: participants in Wave 1 who have experienced IPV.
- Red: participants in Wave 2 who have not experienced IPV.
- Blue: participants in Wave 2 who have experienced IPV.

A curve with a positive slope shows that higher attendance increases the outcome (effect size > 1), a negative slope shows that higher attendance decreases the outcome (effect size < 1), and a flat line indicates no change in the outcome with attendance (effect size = 1). When

interpreting the slopes, one must consider the 95% CIs in the graphs as well as the uncertainty in effect size indicated in the text. The proportional change for participants who attend no sessions reflects what occurs in the sample in the absence of an intervent

Results

Frequency of positive parenting. An explanation on how to interpret the tables provided for each outcome is described below. For post-test, three estimates are provided in the **Table 27**, labelled Reference, Wave 2, and IPV. When including moderators, the reference estimate is the multiplicative change in the mean outcome at post-test per additional session for the reference group (i.e., participants in Wave 1, no IPV). The Wave 2 estimate is the further multiplicative change per session that occurs for participants who are in Wave 2 rather than Wave 1. Similarly, the IPV estimate refers to participants who had experienced IPV. When excluding moderators, participants are not distinguished by wave or IPV experience. Therefore, the reference estimate is the multiplicative change in the mean outcome at post-test per additional session for all participants (for instance, if the reference estimate is 1.01, it means that the mean outcome increases by 1% for each additional session). The same approach should be used when interpreting the results from the one-year follow-up.

Table 27 shows that without moderators, there is evidence of a relationship between attendance and the frequency of positive parenting at post-test, with each additional session leading to a 1% increase in the PARYC frequency score. An increase in this score is desirable as it indicates a greater usage of positive parenting strategies. For participants who attend all 12 sessions, there is 12.68% increase in the PARYC frequency score from baseline to post-test. The increasing score with higher attendance is captured by the positive slopes in Figure 2. Consider a hypothetical participant who has not attended any sessions, and has a post-test PARYC frequency score of 42, which indicates that, on average, she implements

positive parenting behaviours "sometimes". If she goes from not attending any sessions to attending all 12 sessions, holding all else equal, then her mean post-test score would increase to 47 – still averaging to mean that she implements these behaviours sometimes.

At one-year follow-up, there is no evidence of a relationship between attendance and positive parenting frequency both when moderators are included and excluded. This result is reflected in **Figure 3** where the slopes of the lines are relatively flat, and large uncertainty is shown by the wide CIs.

Table 27

Dose-effect Results: PARYC Frequency Score

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Post-test				
Reference	1.01 [1.01, 1.02]	<.01	1.01 [1.00, 1.02]	.05
Wave 2			1.01 [1.00, 1.02]	.09
IPV			1.01 [1.00, 1.02]	.20
One-year follow-up				
Reference	1.00 [0.99, 1.00]	.84	1.00 [0.99, 1.01]	.54
Wave 2			1.01 [1.00, 1.02]	.23
IPV			1.00 [0.99, 1.01]	.58

Figure 2. *Change in PARYC Frequency Score with Attendance (Post-test)*

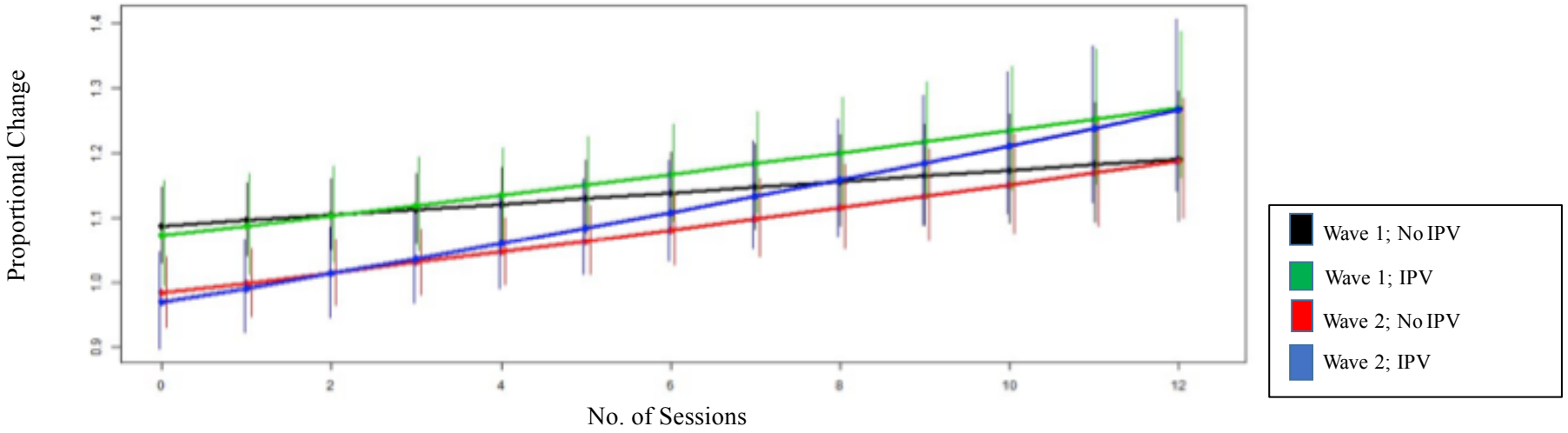
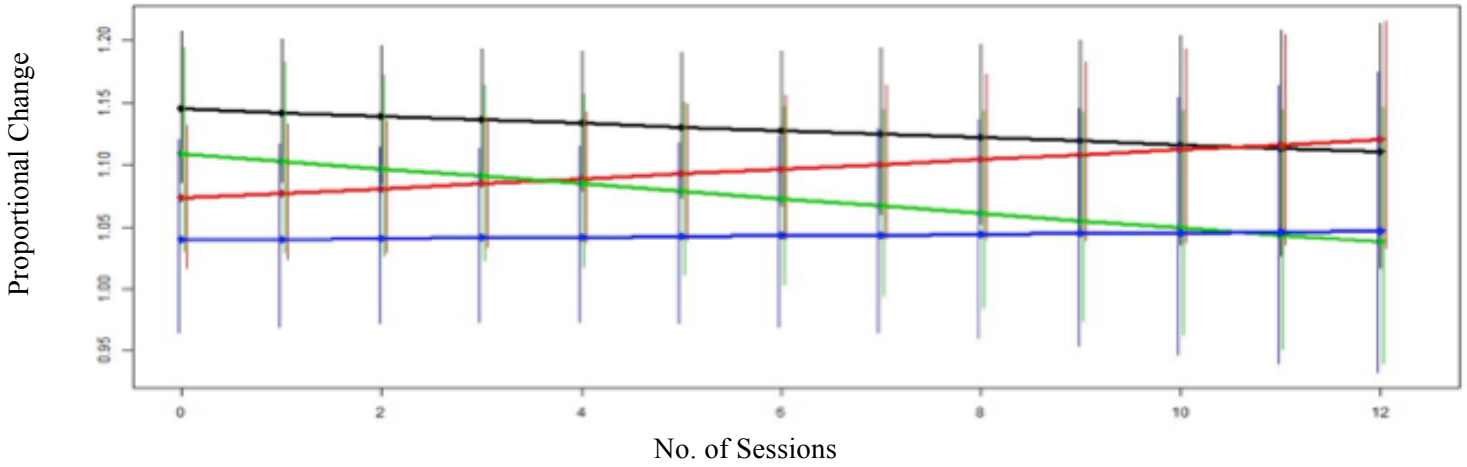


Figure 3. *Change in PARYC Frequency Score with Attendance (One-year)*



Positive parenting problem. There is evidence of a relationship between attendance and the positive parenting problem score at post-test when excluding moderators - each additional session decreased the score by 5% (see Table 28 for results). Referring again to our hypothetical participant – let us consider that she has not attended any sessions, and has a post-test PARYC problem score of 4, which aligns with the group mean of 3.66 out of a possible 14 problems. If she goes from not attending any sessions to attending all 12 sessions, holding all else equal, then her post-test score would drop to 2.16 problems.

When including moderators, there appears to be no dose-effect relationship in participants who do not experience IPV. However, participants who experienced IPV had a 6% lower problem score per session than participants who did not experience it. The decreases in the problem score are shown by the negative slopes in Figure 5. The moderation by IPV experience is shown by the steeper slope in the groups of participants who experience IPV (i.e., blue and red lines). For participants who attended 0 sessions, in Wave 1 there is a decrease in the score from baseline to post-test, while in Wave 2 there is an increase.

At one-year follow-up there appeared to be no dose-effect. There is a evidence of a lack of an effect for both for the models with and without moderators, as can be seen in **Figure 5**.

Table 28

Dose-effect Results: PARYC Problem Score

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Post-test				
Reference	0.95 [0.93, 0.98]	<.01	0.99 [0.95, 1.03]	.58
Wave 2			0.97 [0.92, 1.02]	.27
IPV			0.94 [0.88, 0.99]	.02
One-year follow-up				
Reference	1.01 [0.98, 1.04]	.44	0.99 [0.95, 1.03]	.54
Wave 2			1.02 [0.97, 1.07]	.56
IPV			1.04 [0.99, 1.10]	.13

Figure 4. *Change in PARYC Problem Score with Attendance (Post-test)*

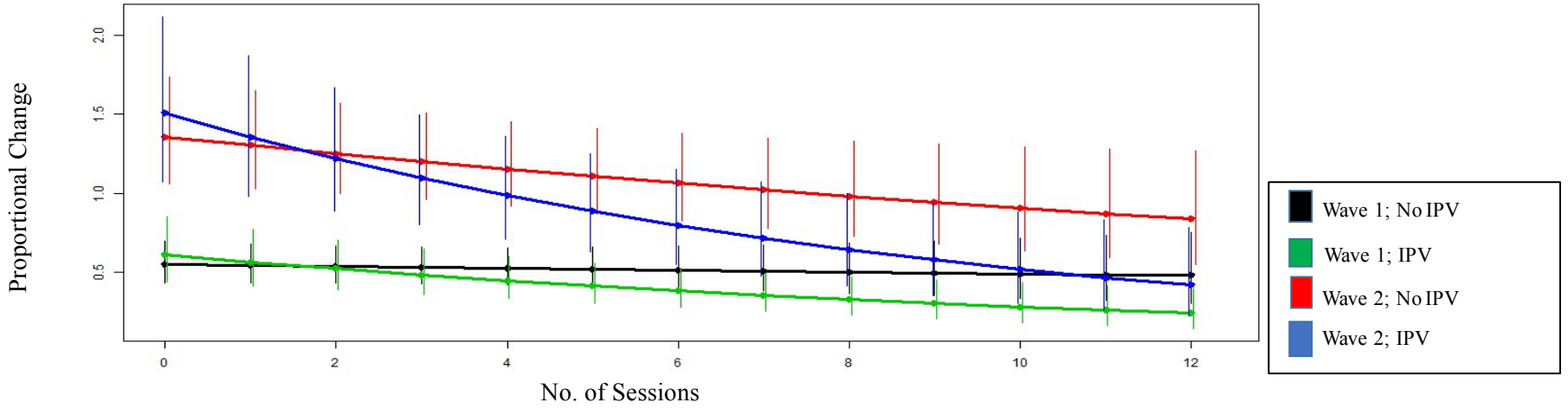
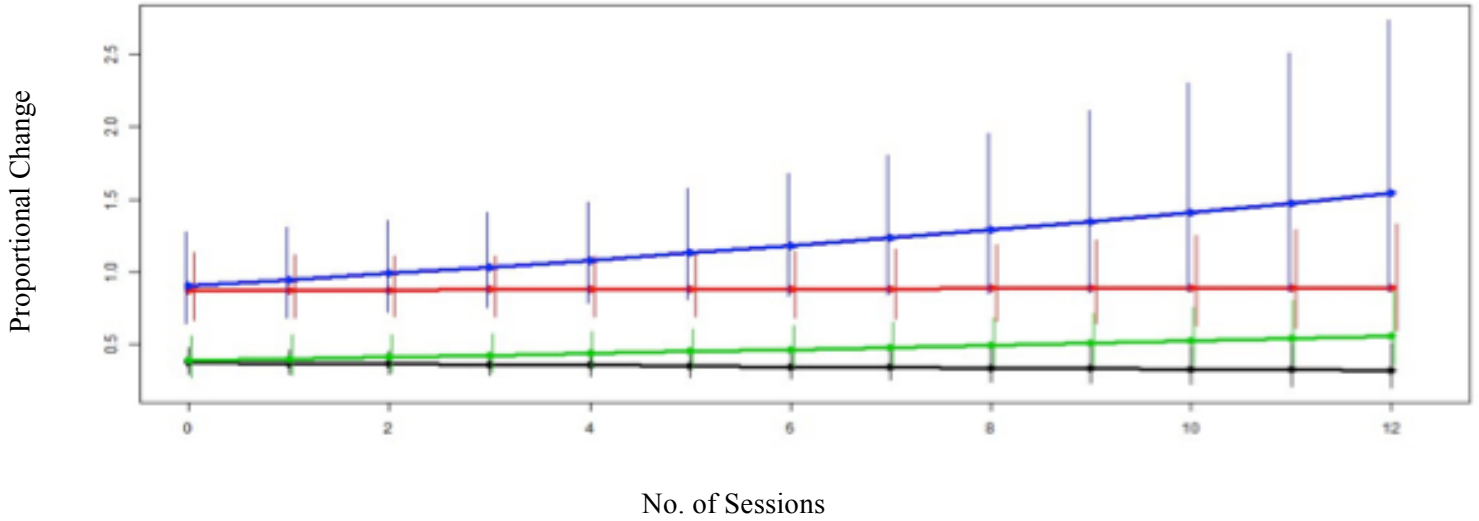


Figure 5. *Change in PARYC Problem Score with Attendance (One-year)*



Child behaviour problems (Intensity). For each additional session attended, the mean ECBI Intensity score decreased by 1% at post-test - the decrease is in the desired direction and indicates less frequent child behaviour problems (see Table 29 for results). Consider a participant who has not attended any sessions, and has a pre-test ECBI intensity score of 114 (which is close to the control group mean of 116 - i.e., on average, she "rarely" observes her child performing the 36 problem behaviours). If she goes from not attending any sessions to attending all 12 sessions, holding all else equal, then her post-test score would drop to 101, which indicates that she still "rarely" sees each of the problem behaviours.

When looking at the model that includes possible moderators, being in Wave 2 or experiencing IPV both appear to decrease the ECBI Intensity score for each additional session attended. There is no dose-effect for the reference group. These results are reflected in Figure 6. The figure also shows that amongst participants who attended no sessions, the mean ECBI Intensity Score decreases from baseline to post-test.

At one-year follow-up there appeared to be no relationship between attendance and the frequency of child behaviour problems as reported by parents – both in the model which included and excluded moderators (see **Figure 7**).

Table 29

Dose-effect Results: ECBI Intensity Score

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Post-test				
Reference	0.99 [0.99, 1.00]	.02	1.00 [0.99, 1.01]	.36
Wave 2			0.99 [0.98, 1.00]	.03
IPV			0.99 [0.97, 1.00]	.03
One-year follow-up				
Reference	1.00 [0.99, 1.01]	.26	1.00 [0.99, 1.01]	.95
Wave 2			1.00 [0.99, 1.01]	.83
IPV			0.99 [0.98, 1.01]	.30

Figure 6. *Change in ECBI Intensity Score with Attendance (Post-test)*

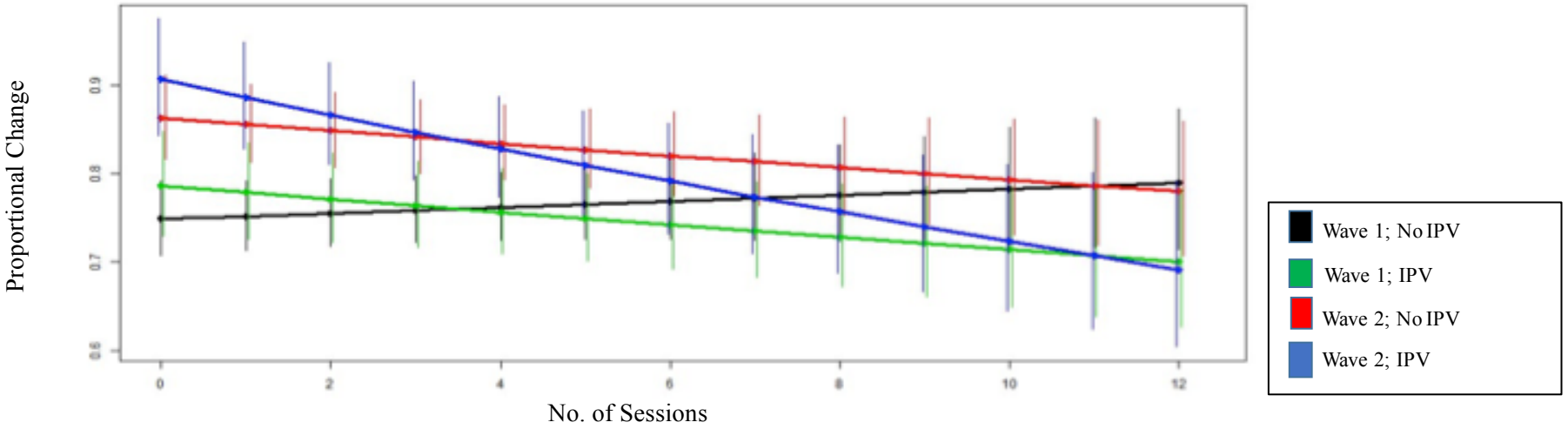
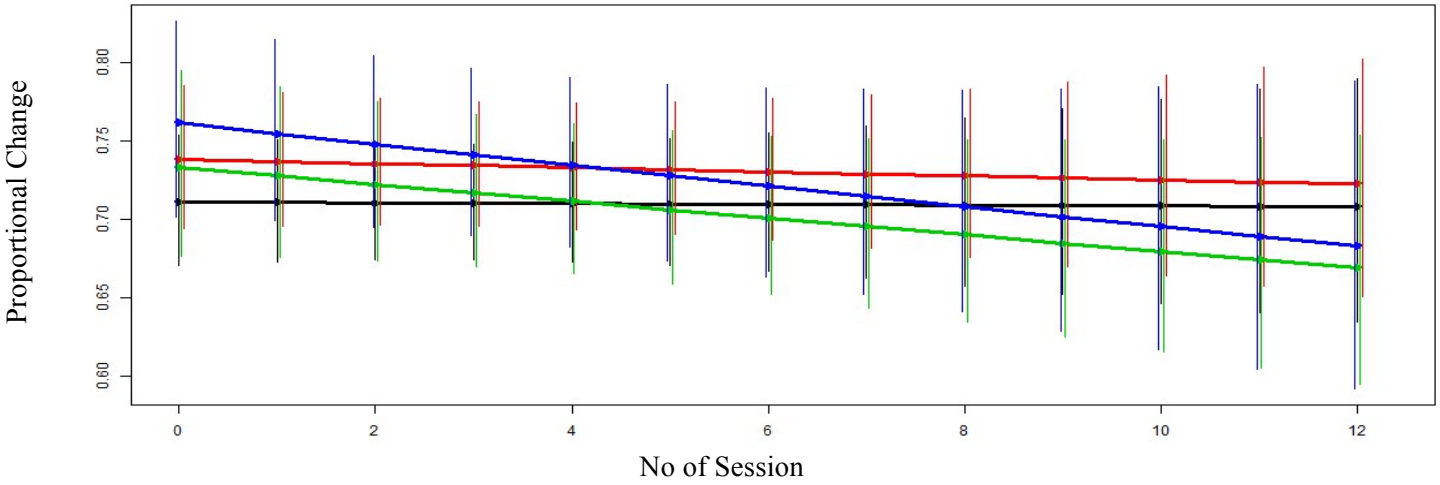


Figure 7. *Change in ECBI Intensity Score with Attendance (One-year)*



Child behaviour problems (Problem). There is a relationship between attendance and the ECBI Problem score at post-test when considering the model with no moderators (see Table 30 for results). For each additional session attended, the mean score decreased by 2%, with the change being in the desired direction. Consider a participant who has not attended any sessions, and has a post-test ECBI problem score of 18, which is the same as the group mean. This score indicates that the participant considers 50% of the 36 problem behaviours as a problem for her. If she goes from not attending any sessions to attending all 12 sessions, holding all else equal, then her post-test score would drop to 16 problems, or 44% of the possible total number of problems.

When including moderators, there is no dose-effect relationship for participants who do not experience IPV, as shown by the "flattest" lines in Figure 8 (i.e., red and black). Parents who experienced IPV had a 4% lower problem score per session than those who did not experience IPV. These participants are shown by the two steepest lines (i.e., blue and green) in Figure 8

There is no evidence of a relationship between attendance and the problem score at the one-year follow-up, both when moderators are included and when they are not (see **Figure 9**).

Table 30

Dose-effect Results: ECBI Problem Score

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Post-test				
Reference	0.98 [0.97, 1.00]	.05	1.01 [0.98, 1.03]	.52
Wave 2			0.97 [0.94, 1.01]	.12
IPV			0.96 [0.93, 1.00]	.04
One-year follow-up				
Reference	1.00 [0.98, 1.01]	.58	1.00 [0.97, 1.03]	93
Wave 2			0.98 [0.95, 1.02]	.32
IPV			1.02 [0.98, 1.05]	.37

Figure 8. *Change in ECBI Problem Score with Attendance (Post-test)*

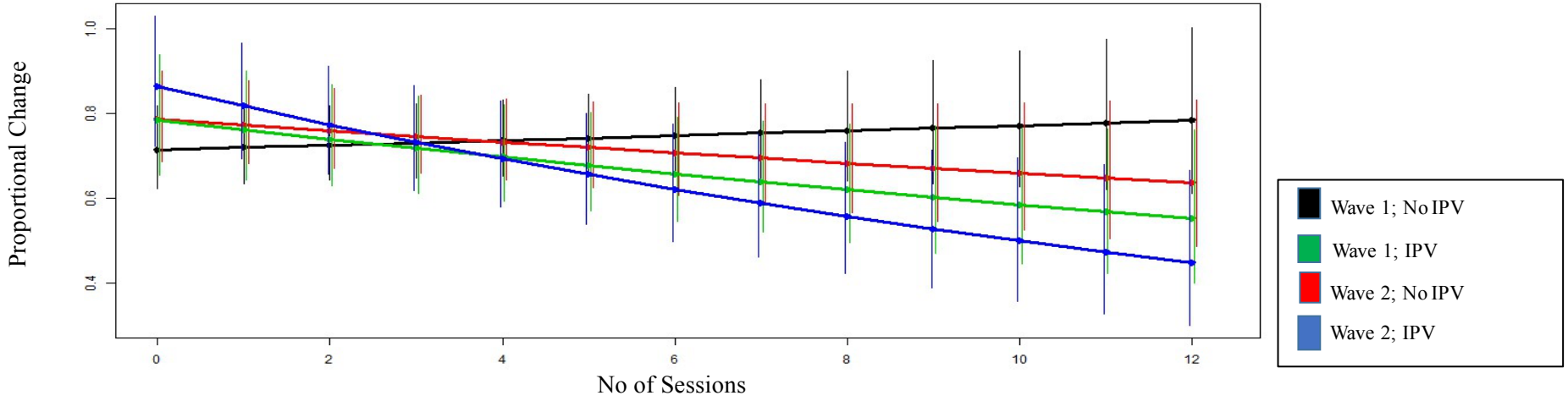
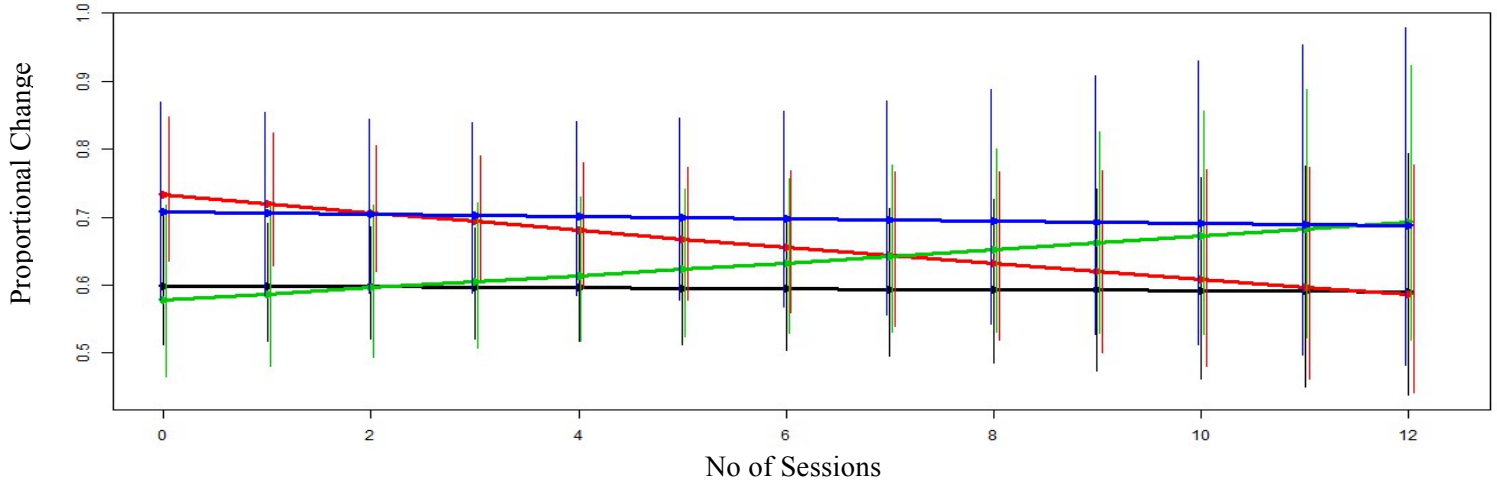


Figure 9. *Change in ECBI Problem Score with Attendance (One-year)*



Physical punishment. There is evidence of a relationship between attendance and physical punishment at post-test when excluding moderators (see Table 31 for results). For each additional session attended, the use of physical punishment decreased by 4%. Consider a participant who has not attended any sessions and has an ICAST-P physical discipline score of 3, just higher than the mean score of 2.77 out of a possible 28 - if she goes from not attending any sessions to attending all 12 sessions, holding all else equal, then her post-test score would drop to 1.84.

When including moderators, Wave plays a role with those participants in Wave 2 who have a 9% lower physical punishment score per session attended, when compared to participants in Wave 1. In Wave 1 there was no dose-effect, which is clearly seen by the relatively flat lines in Figure 10.

There is no evidence of a relationship between attendance and physical punishment use at one-year follow-up when excluding moderators. However, in the model with moderators, IPV appears to be a moderator. More specifically, in the reference group (i.e., no IPV and Wave 1) there is a 5% decrease in physical punishment for each additional session. However, a participant in Wave 1 who experiences IPV has a 2% increase (0.95 x 1.07 = 1.02) in physical punishment for each additional session. This moderating effect of IPV is shown clearly in **Figure 11**.

Table 31
Dose-effect Results: ICAST-P Physical Discipline Subscale

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Post-test				
Reference	0.96 [0.94, 0.99]	<.01	1.02 [0.97, 1.06]	.47
Wave 2			0.91 [0.87, 0.96]	<.01
IPV			0.96 [0.91, 1.02]	.19
One-year follow-up				
Reference	0.98 [0.95, 1.01]	.14	0.95 [0.91, 1.00]	.07
Wave 2			0.99 [0.93, 1.05]	.78
IPV			1.07 [1.00, 1.14]	.04

Figure 10. *Change in ICAST-P Physical Discipline with Attendance (Post-test)*

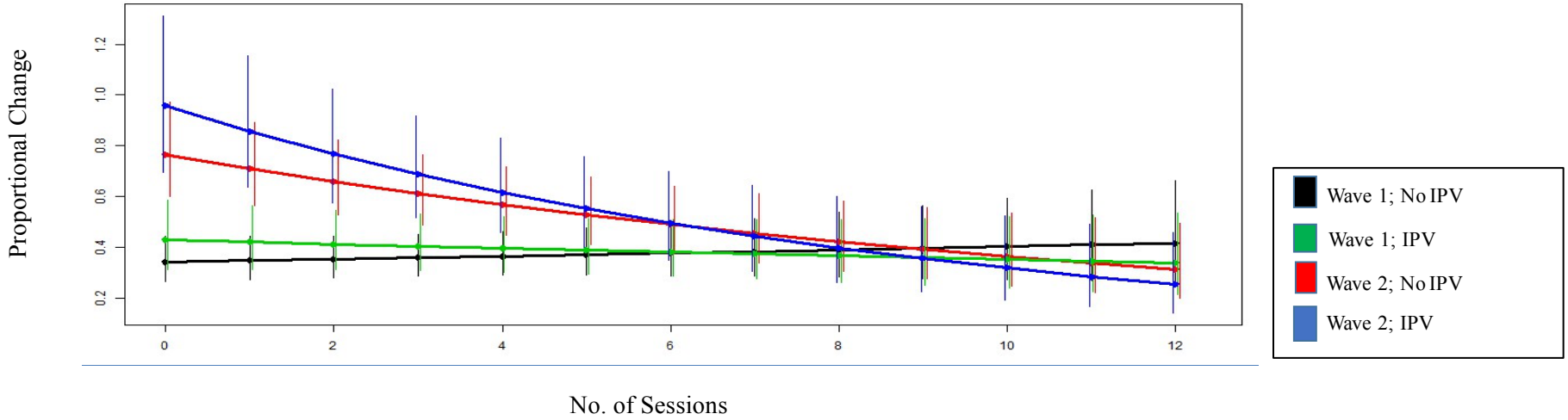
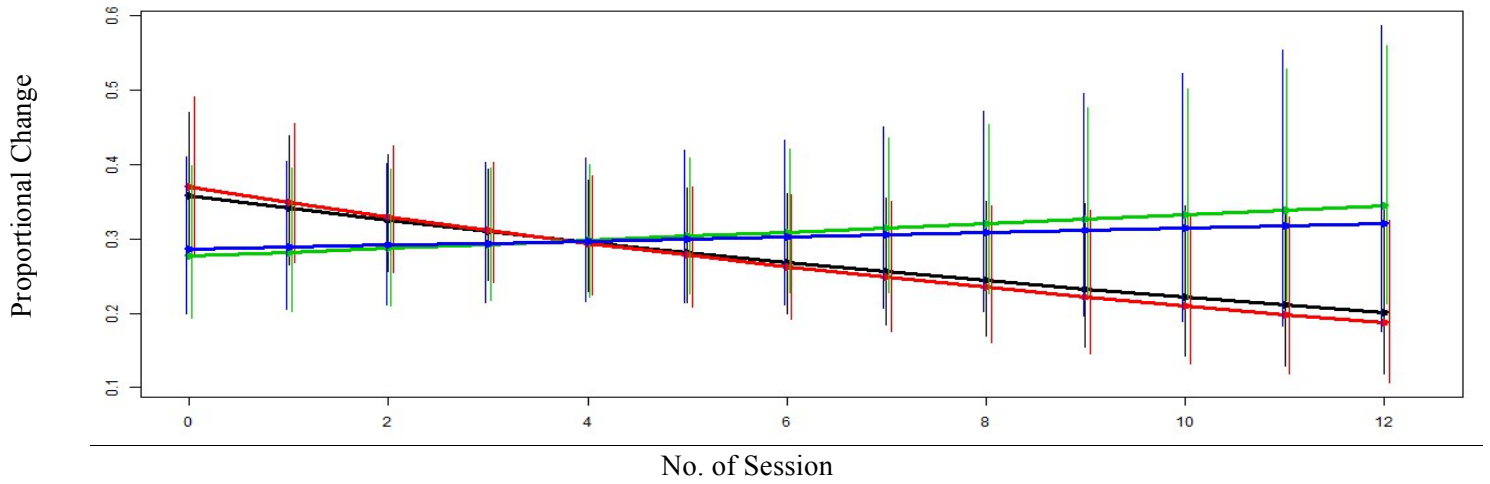


Figure 11. *Change in ICAST-P Physical Discipline with Attendance (One-year)*



Emotional punishment. With no moderators, there is a relationship between attendance and emotional punishment at post-test – for each additional session attended, the use of this discipline type decreases by 2% (see **Table 32** for results). Consider a participant who has not attended any sessions, and who has an ICAST-P psychological discipline score of 4, just higher than the mean score of 3.72. If she goes from not attending any sessions to attending all 12 sessions, holding all else equal, then her post-test score would drop to 3.14.

When introducing moderators, Wave appears to have a moderating effect, with participants in Wave 2 having a 6% lower score than participants in Wave 1 per session attended. There is no dose-effect for participants in Wave 1 as shown by the relatively flat green and black lines in **Figure 12**.

There is no evidence of a relationship between attendance and emotional punishment at the one-year follow-up, both when moderators are included and when they are not. Even though there are no dose-effect relationships, it is interesting to note the change from baseline to one-year, even when no sessions are attended, is very different in the two Waves. Estimates of these changes ranged from 50 to 75%. This difference was also seen in changes from baseline to post-test, as displayed in **Figure 13**.

Table 32

Dose-effect Results: ICAST-P Psychological Discipline Subscale

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Post-test				
Reference	0.98 [0.96, 1.00]	.01	1.02 [0.99, 1.05]	.31
Wave 2			.94 [0.91, .98]	<.01
IPV			.97 [0.93, 1.01]	.12
One-year follow-up				
Reference	0.99 [0.97, 1.02]	.62	1.01 [0.97, 1.04]	.61
Wave 2			.97 [0.93, 1.01]	.14
IPV			1.00 [.96, 1.05]	.99

Figure 12. *Change in ICAST-P Psychological Discipline with Attendance (Post-test)*

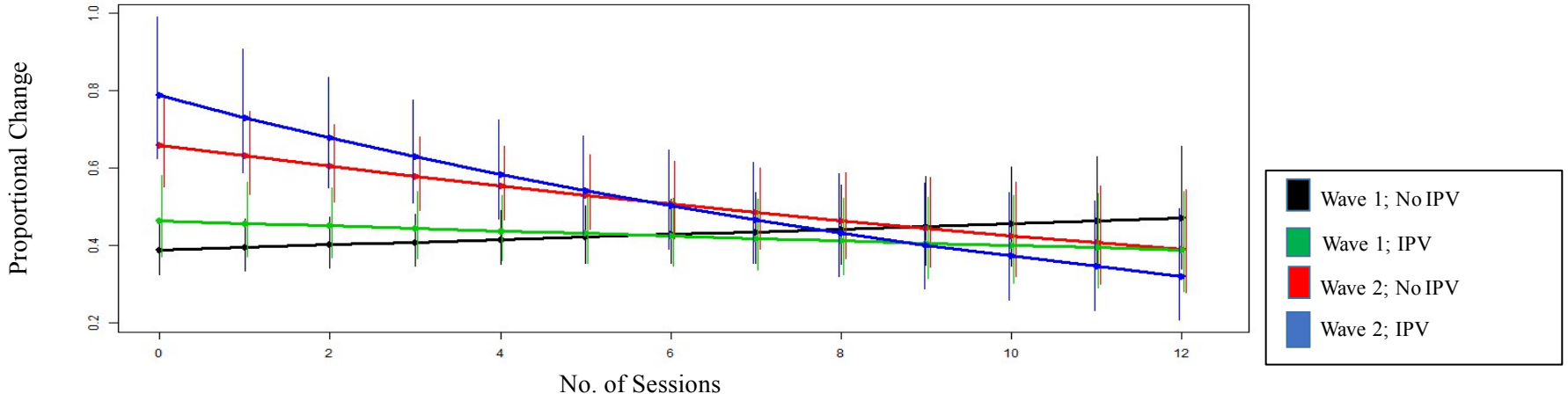
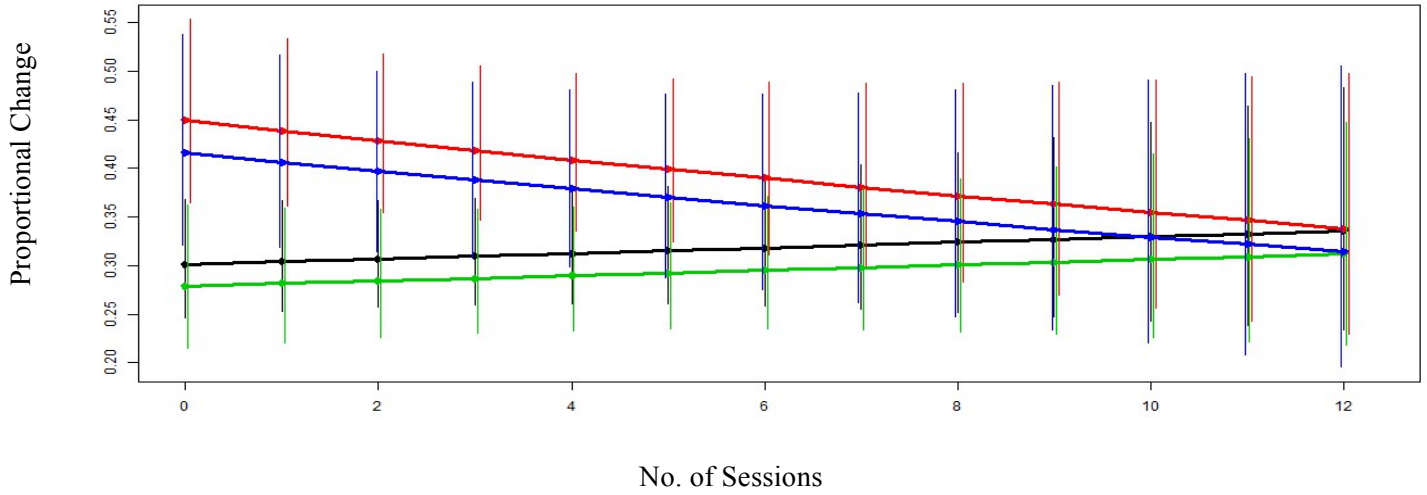


Figure 13. *Change in ICAST-P Psychological Discipline with Attendance (One-year)*



Observed positive child behaviour. With no moderators, there appears to be a relationship between attendance and positive child behaviour at post-test – with greater attendance associated with more observed positive behaviour (see **Table 33** for results). More specifically, for each additional session attended, the mean score increased by 2%. Consider a hypothetical participant who has not attended any sessions, and has a mean observed positive child behaviour score of 24.11, in alignment with the mean. If she goes from not attending any sessions to attending all 12 sessions, holding all else equal, then her mean post-test score would increase to 30.58.

Once moderators are included, there seems to be a Wave effect at post-test, with participants in Wave 2 increasing their positive child behaviour score by 4% for each additional session attended. In Wave 1, there is no dose-effect as seen by the relatively flat green and black lines in Figure 14.

There is no evidence of dose-effect at the one-year follow-up when moderators are excluded. However, once the influence of possible moderators was disentangled, dose-effect relationships became evident in participants who experience IPV – the effect of IPV is seen in **Figure 15**. These participants have a 4% larger observed positive child behaviour score per session than participants who do not experience IPV.

Table 33

Dose-effect Results: Observed Positive Child Behaviour

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Post-test				
Reference	1.02 [1.01, 1.04]	<.01	1.01 [0.99, 1.02]	.48
Wave 2			1.04 [1.03, 1.06]	<.01
IPV			1.01 [0.99, 1.02]	.29
One-year follow-up				
Reference	1.01 [1.00, 1.02]	.24	0.99 [0.97, 1.01]	.33
Wave 2			1.01 [0.98, 1.04]	.49
IPV			1.04 [1.01, 1.06]	<.01

Figure 14. *Change in Observed Positive Child Behaviour With Attendance (Post-test)*

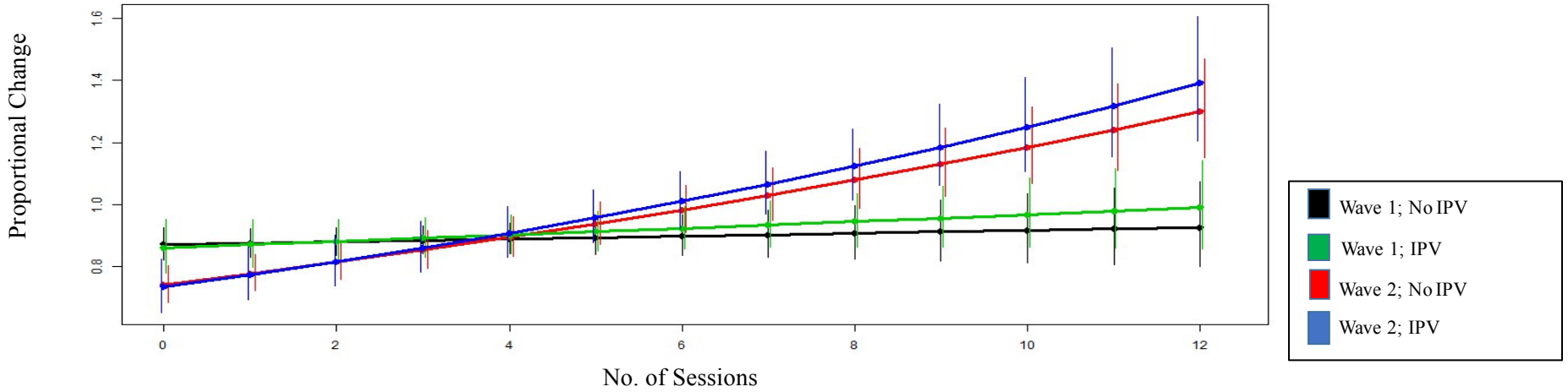
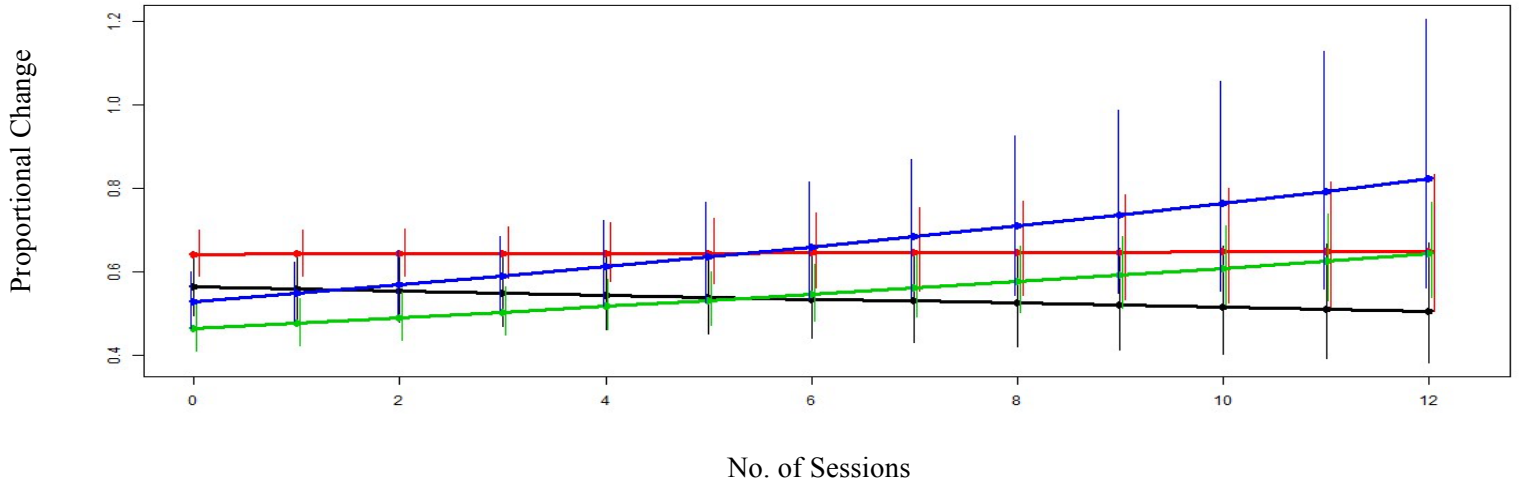


Figure 15. *Change in Observed Positive Child Behaviour With Attendance (One-year)*



Observed negative child behaviour. For observed negative child behaviour, there appears to be no dose-effect relationship when excluding moderators (see Table 34 for results). However, once moderators are included, relationships between attendance and negative child behaviour become evident and even move in different directions. Both Wave and IPV are moderators. Further unpacking the numbers in Table 34, the estimated change in observed negative child behaviour per session is a 5% decrease for participants in Wave 1 who do not experience IPV, a 2% increase (0.95 x 1.07 = 1.02) for participants in Wave 1 who experience IPV, a 1% decrease (0.95 x 1.04 = 0.99) for participants in Wave 2 with no IPV (0.95 x 1.04 = 0.99), and a 6% increase (0.95 x 1.04 x 1.07 = 1.06) for participants in Wave 2 who do experience IPV. These impacts are displayed in Figure 16.

There is no evidence of a relationship between attendance and the observed negative child behaviour at the one-year follow-up, both when moderators are included and when they are not. This lack of relationships is shown by the relatively flat lines in **Figure 17**.

Table 34

Dose-effect Results: Observed Negative Child Behaviour

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Post-test				
Reference	0.99 [0.97, 1.01]	.29	0.95 [0.92, 0.98]	.01
Wave 2			1.04 [1.00, 1.09]	.06
IPV			1.07 [1.02, 1.12]	.01
One-year follow-up				
Reference	1.01 [0.97, 1.05]	.61	1.01 [0.96, 1.07]	.60
Wave 2			0.99 [0.92, 1.07]	.85
IPV			0.99 [0.90, 1.09]	.84

Figure 16. *Change in Observed Negative Child Behaviour With Attendance (Post-test)*

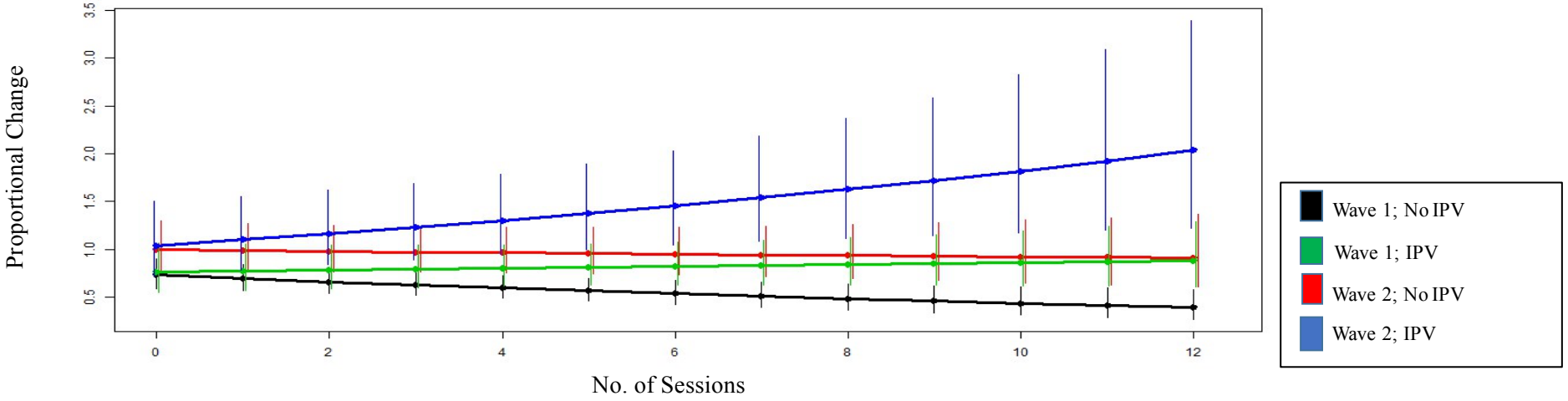
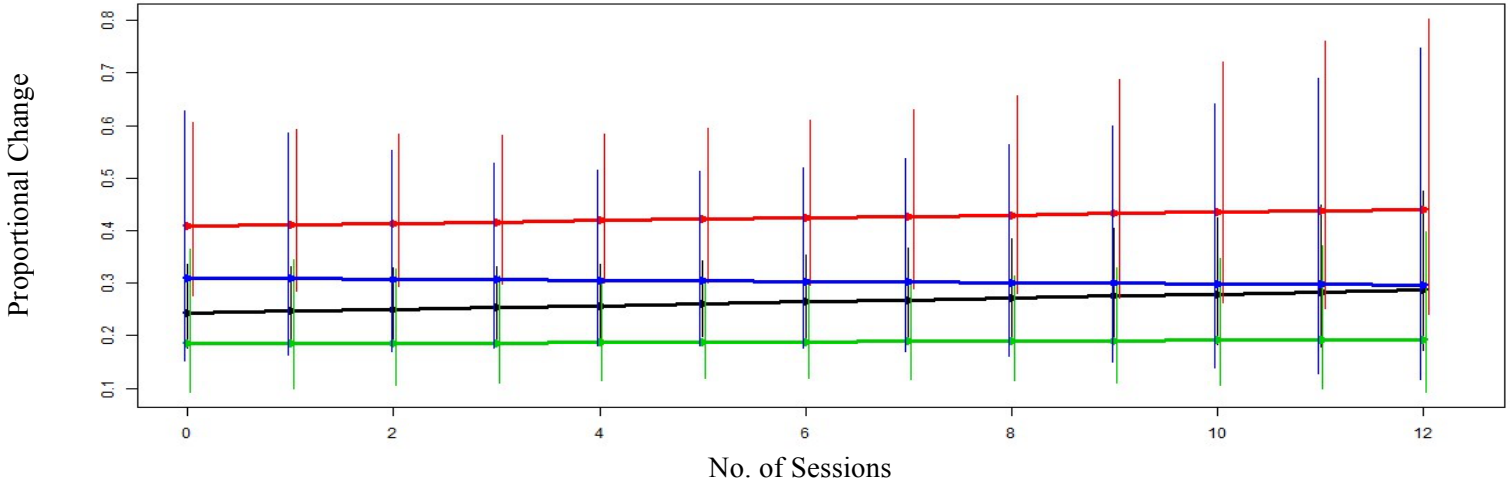


Figure 17. *Change in Observed Negative Child Behaviour With Attendance (One-year)*



Observed positive parent behaviour. Without moderators, there appears to be a relationship between attendance and positive parent behaviour at post-test, with this behaviour increasing by 4% for each additional session (see **Table 35** for results). Consider a participant who has not attended any sessions, and has an observed positive child behaviour score of 8.79, in alignment with the group mean. If she goes from not attending any sessions to attending all 12 sessions, holding all else equal, then her post-test score would increase to 14.07 observed positive parent behaviours.

When including moderators, both Wave and IPV play a role. While there is no dose-effect relationship in the reference group, participants in Wave 2 have a 4% higher score than participants in Wave 1 per session. Similarly, participants experiencing IPV have a 4% higher score than those without IPV per session.

With no moderators, there is a dose-effect relationship at one-year follow-up with observed positive parenting behaviour increasing by 3% for each additional session. With moderators, Wave 2 participants had a 7% increase in this behaviour when compared to participants in Wave 1 per session. There is a lack of dose-effect relationships for participants in Wave 1. It is interesting to note that even when attending no sessions, there is a 22 to 47% reduction from baseline to post-test and 49 to 67% reduction from baseline to one-year (seen by the low starting points in Figure 18 and Figure 19.

Table 35
Dose-effect Results: Observed Positive Parent Behaviour

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Post-test				
Reference	1.04 [1.03, 1.05]	<.01	1.01 [1.00, 1.02]	.21
Wave 2			1.04 [0.02, 1.06]	<.01
IPV			1.04 [0.02, 1.06]	<.01
One-year follow-up				
Reference	1.03 [1.01, 1.05]	<.01	1.00 [0.97, 1.03]	.76
Wave 2			1.07 [0.04, 1.10]	<.01
IPV			1.01 [0.98, 1.05]	.58

Figure 18. *Change in Observed Positive Parent Behaviour With Attendance (Post-test)*

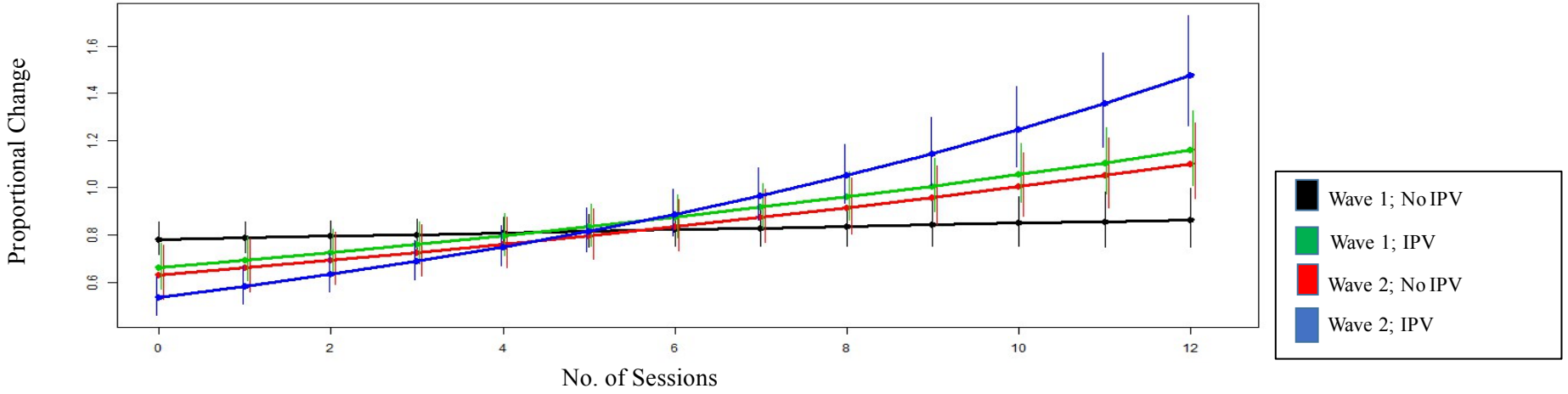
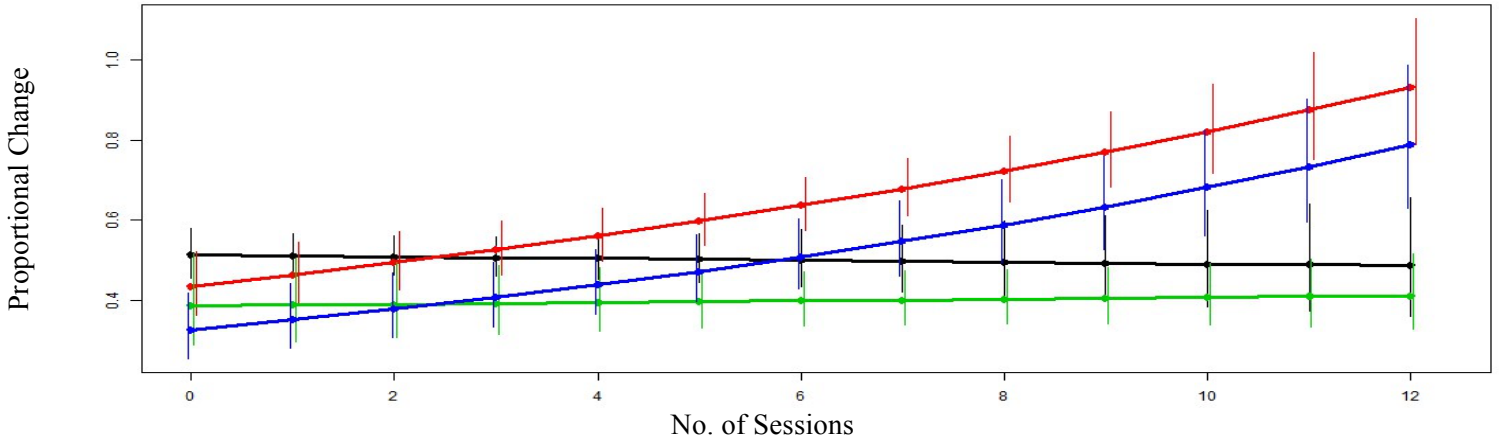


Figure 19. *Change in Observed Positive Parent Behaviour with Attendance (One-year)*



Observed negative parent behaviour. There appears to be no relationship between negative parent behaviour and attendance at post-test (see Table 36 for results). However, with moderators, being a participant in Wave 2 increased negative parenting by 5% per session attended when compared to participants in Wave 1 – this increase is shown by the blue and red lines in Figure 20. There is no dose-effect for participants in Wave 1.

While there was no dose-effect relationship at the one-year follow-up when excluding moderators, the inclusion of moderators indicates that Wave is a moderator with relationships moving in different directions as shown in **Figure 21**. In the reference group, there is a 5% increase per session attended. In Wave 2, when there is no IPV, there is a 10% decrease per session attended (1.05 x 0.86 = 0.90). There are large differences in the change (some increases, some decreases) over time when there is no intervention, by IPV and Wave – see **Figure 21**.

Table 36

Dose-effect Results: Observed Negative Parent Behaviour

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
Post-test				
Reference	1.01 [0.99, 1.02]	.47	0.98 [0.95, 1.01]	.11
Wave 2			1.05 [1.01, 1.09]	.01
IPV			1.03 [0.98, 1.07]	.24
One-year follow-up				
Reference	0.99 [0.95, 1.02]	.44	1.05 [1.01, 1.10]	.02
Wave 2			0.86 [0.82, 0.91]	<.01
IPV			1.04 [0.95, 1.14]	.38

Figure 20. *Change in Observed Negative Parent Behaviour With Attendance (Post-test)*

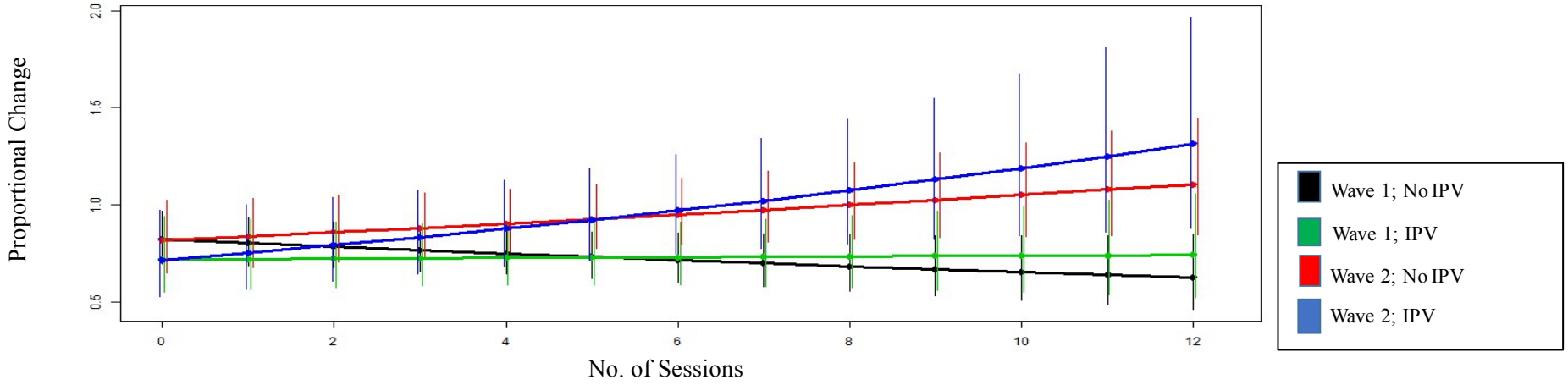
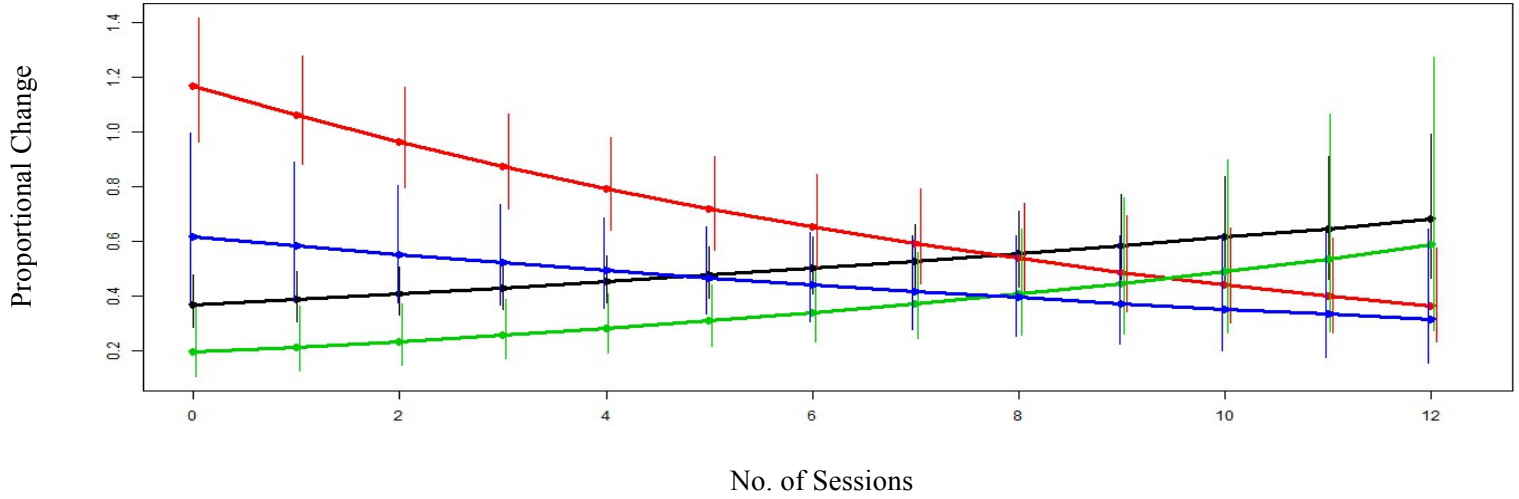


Figure 21. *Change in Observed Negative Parent Behaviour With Attendance (One-year)*



Summary of results. Results indicate that, when exluding moderators, higher attendance is associated with improved intervention outcomes from baseline to post-test, with the exception of observed negative behaviours. At one-year follow-up, there is only a dose-effect relationship for observed positive behaviours. The relationships are in the desired directions, although the magnitude of the changes is, for the most part, small, which raises questions about how meaningful they are for actual practice.

When including moderators, there are 16 instances where there is significant change in a specific outcome with higher attendance – these are identified with a "yes" in **Table 37** below. The group of participants that experiences this change, as well as the direction of the change, is also provided in the table. Most dose-response relationships were seen at post-test and not at the one-year follow-up.

The frequency of positive parenting is the only outcome where a higher score with increased attendance is seen for all participants, regardless of wave and experience of IPV. Participants who were either in Wave 2 or experienced IPV appeared to show the most improvements with increased attendance, while those both in Wave 1 and who did not experience IPV benefited least from attending sessions.

For two of the outcomes, there were changes in different directions with increased attendance. At post-test, participants who experienced IPV had children who had higher observed negative behaviour with increased attendance, while children of participants in the reference group showed a decrease in this behaviour with increased attendance. For observed negative parent behaviour, participants in the reference group (i.e., Wave 1 and no IPV) displayed more of this behaviour at the one-year follow-up, while it decreased for participants in Wave 2.

In summary, results of analyses exploring dose-effect relationships show that there tends to be a relationship between higher attendance of SCFP sessions and improved

outcomes, predominantly at post-test, when including no moderators. However, when introducing moderators, it becomes clear that different categories of participants benefit at varying levels, with some showing no improvement with increased attendance and others showing substantial improvement. This finding has clear implications for practice, which will be presented in the Discussion chapter (Chapter 9).

Table 37

Summary of Dose-effect Relationships When Including Moderators

Outcome	Timepoint	
	Post-test	One-year follow-up
Positive parenting (Frequency)	Yes: All participants (more positive parenting)	No
Positive parenting (Problem)	Yes: IPV only (more positive parenting)	No
Child behaviour (Intensity)	Yes: Wave 2 or IPV (less problematic child behaviour)	No
Child behaviour (Problem)	Yes: IPV only (fewer child behaviour problems)	No
Physical punishment	Yes: Wave 2 only (less physical punishment)	Yes: IPV only (more physical punishment)
Emotional punishment	Yes: Wave 2 only (less emotional punishment)	No
Positive child (Observed)	Yes: Wave 2 only (more positive child behaviour)	Yes: IPV only (more positive child behaviour)
Negative child (Observed)	Yes: Reference (less negative child behaviour) Yes: IPV (more negative child behaviour)	No
Positive parent (Observed)	Yes: Wave 2 or IPV (more positive parent behaviour)	Yes: Wave 2 only (more positive parent behaviour)
Negative parent (Observed)	Yes: Wave 2 only (more negative parent behaviour)	Yes: Reference (more negative parent behaviour) Yes: Wave 2 (less negative parent behaviour)

Chapter 8: Additional Process Data

This chapter presents the analysis and results from the additional process data collected during the RCT of the SCFP. This data includes participants' understanding of session content and their confidence in implementing it, facilitator ratings of participation, and overall programme satisfaction.

Measures

Participant understanding and confidence. At the end of sessions 1 to 11, data was collected after each session on participants' understanding of session content and about how confident they felt about implementing skills at home. Participants provided their responses to these items on a 4-point Likert-like scale on a paper-based form (see Appendix U). Responses for the item on understanding ranged from 1 (participant did not understand the skills covered in the session) to 4 (participant understood all of the skills covered in the session). Similarly, for the item on confidence, a response of 1 reflected that the participant did not feel confident to practice the skills at home, while 4 reflected that they felt very confident to practice the skills at home.

Facilitator ratings of quality of participation. Immediately after each session, facilitators worked in pairs to complete a paper-based checklist where they answered specific questions about each participant using four- and five-point Likert-like scales (see Appendix V). These items included: "When did the parent come to the session today?"; "Did the parent do her or his home practice?"; "How did the parent participate in the session?"; and "How interested was the parent in the session activities?". The responses to these items were summed to get a "participation score" for each participant for each session. Unfortunately, there was too little variation in the data for it to be used in modelling.

This type of participation variable aligns with what has been included as "quality of participation" in many studies. In Dumas and colleagues' work (2007) within the PACES programme, group leaders and assistants independently rated each participant's quality of participation by rating how well a participant participated during a session. Rating responses ranged from 1 – "Did not participate or obstructed group functioning and activities" to 5 – "Participated enthusiastically. Was obviously interested and attentive to other group participants." They found that the ratings from different programme staff were highly correlated, and so they aggregated and averaged them over all attended sessions to generate a single quality of participation score per participant (Dumas et al., 2007). Nix and colleagues (2009) required group leaders to rate, using a 3- or 5-point scale, each participant on multiple dimensions, including the amount of and quality of participation in the session, the amount of and quality of participation in parent–child sharing time, and the completion of home practice tasks. Once items were summed, higher total scores indicated better engagement.

Programme satisfaction. Parents' overall satisfaction with the programme was assessed using a 45-item paper-based survey adapted from the *Incredible Years Parent Program Satisfaction Questionnaire* (Reid, Webster-Stratton, & Beauchaine, 2001) (see Appendix W); parents completed this questionnaire during Session 12. Using a Likert-like scale of 0 to 5, participants rated the extent to which the programme fulfilled their expectations (10 items, e.g., "overall feeling about achieving [parent's] goal in this programme"), the acceptability of delivery methods (10 items, e.g., "practice of play skills at home"), the acceptability of parenting skills taught (10 items, e.g., "naming feelings"), the quality of facilitation (4 items per facilitator; e.g., "quality of interaction"), and the group ethos (4 items, e.g., "group's interest in parent and their child"). The survey also included the following three open-ended questions:

1.) How could the programme be improved to help you more?

2.) At this time, do you feel the need for additional further parenting assistance? If yes, please elaborate.

3.) What did you see as the main benefit of the SCFP?

A research assistant, who was not associated with programme delivery, administered the survey at the end of Session 12. Items were summed to create an overall satisfaction rating as well as ratings for each subscale, with higher scores indicating greater satisfaction. Total scores were based on weighted means out of 100 for comparison purposes across subscales.

Analysis

Descriptive statistics were used to analyse the process data. The qualitative responses from the satisfaction surveys were analysed thematically.

During Wave 2, our process data capturer was the victim of a smash and grab attack, while stopped at a traffic intersection on her way from the field site to her home. The robber stole her bag containing the forms from Session 2 before they had all been captured. As a result, responses from Session 2 could not be included in the results presented below.

Results

Participant understanding and confidence. The number of responses received at the end of each session was high (see Table 38). Participants felt that they had a good understanding of the session content with mean ratings ranging from 3.15 to 3.87 out of 4 (*M* = 3.72). Ratings of confidence in implementing skills at home were also high, but slightly lower than ratings of understanding – this makes sense since one would need to understand a skill before you could be confident in implementing it. These ratings ranged from 3.20 to 3.79 out of 4, with an average of 3.44.

Table 38

Participant Understanding of Skills and Confidence in Implementing Them at Home

Session no.: Core skill	Group session attendance (*n*)	Number of responses (%)	Understanding *M (SD)**	Confidence *M (SD)**
Session 1: Quality time with you and your child	70	70 (100)	3.76 (.60)	3.48 (1.14)
Session 3: Quality time with your child - Naming feelings	67	62 (92.54)	3.71 (.50)	3.56 (.99)
Session 4: Praising our children	74	70 (94.60)	3.70 (.52)	3.20 (1.29)
Session 5: Rewards	80	77 (96.25)	3.79 (.44)	3.31 (1.23)
Session 6: Giving clear and positive instructions to our children	62	53 (85.48)	3.78 (.66)	3.29 (1.27)
Session 7: Keeping our children safe: Household rules	63	62 (98.41)	3.87 (.34)	3.59 (1.03)
Session 8: Ignoring difficult behaviours	68	67 (98.53)	3.75 (.50)	3.79 (.75)
Session 9: 5-minute cool down: Supporting household rules	68	57 (83.82)	3.81 (.44)	3.39 (1.22)
Session 10: 5-minute cool down: Support to follow instructions	73	64 (87.67)	3.70 (.64)	3.38 (1.20)
Session 11: Consequences and problem-solving	52	52 (100)	3.85 (.41)	3.51 (1.12)

** Values are mean scores on a 4-point Likert-like scale (1 = did not understand/did not feel confident; 4 = understand all of the skills/felt very confident).*

Facilitator ratings of quality of participation. Facilitator ratings are presented in **Table 39**. Percentages have been calculated using the total number of participants who attended the session at the programme venue as the denominator. According to facilitators, most participants were punctual for the sessions and arrived on time. In terms of home practice completion, facilitators rated almost all participants as having completed their home practice completely. This rating raises concerns about the validity of the data since even those participants who did not receive the previous week's home practice, as they had not attended the previous session, were coded as having done it.

Table 39

Facilitator Ratings of Quality of Participation at Each Session

	Session 1	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8	Session 9	Session 10	Session 11	Session 12
Arrival time											
On time (%)	66 (94.29)	56 (83.58)	67 (90.54)	72 (90)	57 (91.94)	55 (87.30)	59 (86.77)	66 (97.06)	67 (91.78)	46 (88.46)	77 (91.67)
Before teatime (%)	4 (5.71)	10 (14.93)	6 (8.12)	8 (10)	4 (6.45)	6 (9.52)	8 (11.76)	2 (2.94)	4 (5.48)	4 (7.69)	5 (5.95)
During teatime (%)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1.19)
After teatime (%)	0 (0)	1 (1.50)	1 (1.35)	0 (0)	1 (1.61)	2 (3.18)	1 (1.47)	0 (0)	2 (2.74)	2 (3.85)	1 (1.19)
Home practice											
Done correctly (%)	N/A	65 (97.02)	72 (97.30)	72 (90)	61 (98.39)	72 (98.63)	68 (100)	68 (100)	70 (97.22)	48 (92.31)	80 (95.24)
Done, but incorrectly (%)	N/A	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Tried, but failed (%)	N/A	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Did not try (%)	N/A	2 (2.99)	2 (2.70)	8 (10)	1 (1.61)	1 (1.37)	0 (0)	0 (0)	2 (2.78)	4 (7.69)	4 (4.76)
Participation											
Participated throughout (%)	62 (88.57)	62 (92.54)	70 (94.59)	71 (88.75)	60 (96.77)	69 (94.52)	64 (94.12)	61 (89.71)	68 (93.15)	50 (96.15)	81 (96.43)
Most of the time, but needed prompting (%)	8 (11.43)	5 (7.46)	4 (5.41)	9 (11.25)	2 (3.23)	4 (5.48)	4 (5.88)	6 (8.82)	5 (6.85)	2 (3.85)	2 (2.38)
Participated only when prompted (%)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1.47)	0 (0)	0 (0)	1 (1.19)
Participated reluctantly and was mostly silent (%)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Did not participate (%)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Interest											
High level of interest in all tasks (%)	63 (90)	54 (80.60)	70 (94.59)	78 (97.50)	58 (93.55)	56 (88.89)	63 (92.65)	61 (89.71)	66 (90.41)	46 (88.46)	82 (97.62)
Interest in most tasks (%)	7 (10)	12 (17.90)	4 (5.41)	2 (2.50)	4 (6.45)	7 (11.11)	5 (7.35)	6 (8.82)	7 (9.59)	6 (11.54)	2 (2.38)
Some interest (%)	0 (0)	1 (1.49)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1.47)	0 (0)	0 (0)	0 (0)
Little interest (%)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
No interest shown (%)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Overall programme satisfaction. The 84 participants (56.76% of the intervention group) who attended Session 12 completed overall satisfaction forms. Out of a total score of 100, these participants reported very high overall programme satisfaction (M = 94.86; SD = 8.17). Parents gave high ratings to the programme's ability to meet their goals and expectations (M = 90.04; SD = 3.25), the format of delivery (M = 95.4; SD = 3.03), the appropriateness of parenting skills covered (M = 95.48; SD = 3.02), the quality of facilitation (M = 98.46; SD = 1.32), and supportiveness of the group (M = 98.60; SD = 0.42).

Fourteen participants (16.67%) responded to the open-ended item on how the programme could be improved. Three low attenders (3.57%), who were nevertheless at Session 12, commented that they would like more one-on-one time with a facilitator at home:

> It would be better if the programme was done in my own house where I could be taught alone. (Participant #72)

Three participants (3.57%) suggested that fathers be included in future rounds of the programme:

> I think that the way they planned it was very nice, but I think that it should involve fathers as well. (Participant #221)
>
> Not that I am complaining, but I would suggest including a session for the fathers. (Participant #210)
>
> I would like the fathers to be involved in these groups as well so that they could also learn about the children. (Participant #72)

Two participants (2.38%) suggested that children also be invited to participate in the programme. Their rationale was that children could then learn the skills directly so that they could be more easily implemented at home. Two different participants would have liked the programme to have been extended to serve parents of older children too – the suggested age range was from 2- to 13-years. Also, three parents (3.57%) wanted to receive more of the

programme, either via meeting more regularly than once per week or by increasing the duration of the programme. One parent suggested that the programme be shown on television "so that we can see what we are doing right or wrong".

When asked whether they needed additional parenting support, 13 parents (15.48%) said that they did. Two of these participants explicitly stated that they were worried that programme benefits would diminish once the programme ended:

> I listened to everything that was said during the programme, but I feel as though when we finish with the programme, things will go back to the way they were before. (Participant #237, high attender)

Another parent (Participant #250, high attender) said that she needed additional help "because [her] child is young and still doesn't listen to [her]". This statement contradicts her quantitative satisfaction data, which states that the problem that prompted her involvement in the programme is "much better" and her score reflecting whether the programme fulfilled her expectations was 84/100. This may indicate that while things are better for her, she still would like more assistance.

Of the 82 participants that responded to the question about what they found most helpful about the programme, 25 (30.49%) did not give an explicit answer. Responses were typically given as "the programme was great" or "the programme was very helpful to my family and me". For the remaining participants, developing a positive parent-child relationship through spending special time (n = 46; 56.10%), gaining positive discipline skills (n = 8; 9.76%), building self-confidence (n = 2; 2.44%) and gaining confidence in accessing additional services (n = 1; 1.20%) were identified as the most valuable outcomes.

This process data indicates that participants appeared to understand all of the session content and felt very confident to implement the taught skills at home – unfortunately, due to a lack of variability in this data, the relationship between confidence and understanding could

not be explored. They were also highly satisfied with the programme as a whole and made few suggestions on how the programme could be improved. Facilitator report indicates that participants had a high quality of participation.

Chapter 9: Discussion

The purpose of this study was to explore engagement (i.e., enrolment, attendance, and home practice completion) in the SCFP during an RCT of the intervention. The rationale for this focus was both to gain a deeper understanding of the process and contextual factors that played out in the trial, and to inform recruitment and retention strategies for future implementation. This study is one of the first of its kind to examine engagement in parent training in a low- or middle-income country, and so provides useful insights to begin to understand this process.

Due to the exploratory nature of this work, I included variables from the literature, from findings from qualitative interviews with SCFP participants, and from experience in running the programme, in models to explore possible predictors of the three components of engagement. These variables relate to parent demographics (parental age, marital status, high school completion), child demographics (child age, child sex), SES (household employment, household hunger level), parent mental and physical health (depression, parenting stress, number of health problems), parental social support, parenting behaviour (positive parenting, non-violent discipline, physical punishment, emotional punishment), parental alcohol misuse, parental experience of IPV, study wave, and facilitator pair. The results of each of these models will be discussed in turn in this chapter. Findings from qualitative interviews on the barriers and facilitators to engaging in the SCFP will also be discussed alongside these results.

The study also explored whether there is a relationship between attendance of SCFP sessions and changes in primary outcomes targeted by the intervention, both when including and excluding study wave and experience of IPV as moderators. When excluding them, results indicated that there was a dose-effect relationship at post-test with higher attendance associated with better outcomes (except for observed negative parent and child behaviour

where there was no such relationship) – although these relationships were typically not evident at the one-year follow-up. While the dose-effect relationship at the post-test is promising, given the lack of impact shown at the one-year follow-up, and the similar gains made by the control group, it is necessary to assess the fit of the programme for these parents – it may be that there is a gap between the programme content and the parents' needs or situation. Also, it may be necessary to explore the inclusion of booster sessions to enhance the likelihood of longer-term intervention benefits (Eyberg, Edwards, Boggs, & Foote, 1998). The lack of maintained effects may be due to participants no longer implementing new skills or doing so incorrectly (Sofronoff & Farbotko, 2002), and so extra support may assist parents.

When including moderators, Wave and IPV appeared to play a role in the relationship between attendance and many of the programme outcomes. Participants who were either in Wave 2 or who experienced IPV benefitted more from receiving a higher number of sessions than those in Wave 1 and those who did not experience IPV. These findings will be discussed in greater detail in this chapter.

This chapter concludes with implications of this work for theory, practice, and research, as well as the study's limitations.

Enrolment in the SCFP

Because there is indeed some evidence of improved outcomes with increased attendance, it is concerning that roughly a quarter of participants assigned to the intervention group, and who had indicated a willingness to attend the programme at the RCT recruitment phase, did not enrol in the SCFP. This pre-treatment attrition rate is higher than the average of 13% (*SD* = 15%; range: 2-91%) calculated in a systematic review of parent training programmes in high-income countries (Chacko et al., 2016). The enrolment rate was also

lower than in the pilot RCT of the SCFP (74.32% here versus 83.80% in the pilot; Lachman et al., 2016a).

In the enrolment model, several variables were shown to predict, to varying degrees, the odds of parents enrolling in the SCFP. Most of these variables were related to the parents' discipline' style, and their mental and physical health. Both in the univariable and multivariable models, lower levels of emotional punishment use were strongly associated with parents enrolling in the SCFP. Additionally, higher levels of physical punishment were also strongly related to enrolment, but this was only evident in the multivariable model. In this latter model, there was also a moderate association between higher levels of non-violent discipline use and enrolment.

The finding on non-violent discipline does not align with many of the reviewed studies, which report that higher levels of negative parenting are typically associated with better engagement – although the studies did not focus on enrolment per se (Baydar et al., 2003; Gorman-Smith et al., 2002). Interpreting the result on physical and emotional punishment requires some speculation since the literature tends to report on harsh parenting as one variable, rather than looking at subscales (Baydar et al., 2003; Charlebois et al., 2001; Kazdin et al., 1995). It may have been that this finding speaks to motivation for change, a variable that the qualitative data suggests is important. It may be that parents who used more physical punishment were more motivated to enrol because they realised that it was not an effective or appropriate strategy for managing their child's problem behaviour and so wanted to learn alternatives. Many parents in South Africa who use physical punishment do believe that there are better ways of dealing with misbehaviour. A national survey of corporal punishment in the country found that although 57% of the sample smacked their children, 72% thought that it was better to talk to children if they did something wrong (Dawes et al., 2005).

Little seems to be known about how parents who use high levels of emotional punishment, such as yelling, criticising, and threatening children with abandonment, perceive their own parenting and relate to their children. It may be that they do not perceive their discipline style to be problematic and so do not feel that they need assistance. It may also be they do not have a good enough relationship with their child to want parenting input. Future studies should explore these relationships in more depth.

In terms of variables related to parent mental health, both parenting stress and depression were associated with enrolment. Parents with less stress were more likely to enrol in the SCFP. Both in the univariable and multivariable models, having a higher level of depression was weakly associated with greater odds of enrolling. The finding that parenting stress and depression impacted enrolment in different directions is interesting, since the literature suggests that parenting stress and depression are usually correlated and so should impact enrolment in the same direction (e.g., Gelfand, Teti, & Radin Fox, 1992). It may have been that the more depressed parents were looking for help, and the highly stressed parents felt that they did not have the time to commit to a lengthy programme.

Several other parent-focused variables were associated with enrolment. Not misusing alcohol as well as having a higher number of health problems was weakly associated with greater odds of enrolling, although this was only in the univariable model. The finding on alcohol makes intuitive sense, especially considering the qualitative data in which participants commonly mentioned how drinking was a serious problem among parents. However, Baydar and colleagues (2003), in one of the few studies that included substance abuse as a predictor variable of engagement (comprised of attendance, percentage of home practice completed, and level of participation in group discussion), found that mothers who reported substance abuse problems displayed better engagement than other mothers who used a comparable level of positive parenting and inconsistent parenting practices at baseline.

While these findings cannot be directly compared since the former focused specifically on enrolment and the latter on a grouped engagement variable, it is still interesting to consider a possible reason for the difference in findings. One explanation may be the way in which these high-risk parents were recruited – for the SCFP trial, participants were recruited door-to-door, while participants in Baydar and colleagues' study were recruited through their children being a part of the Head Start programme. Those in the latter group may have already had some trust in the service as their children were receiving support, and this may have enhanced the help-seeking behaviour of those parents who reported substance abuse. While this explanation is based on speculation, it may suggest the importance of embedding parent training within existing services.

Unlike the finding on alcohol misuse, the finding on health problems was unexpected, since one would expect being unwell would be a barrier to enrolment. In the qualitative work, participants did raise health problems as a barrier but some of these challenges related to difficult pregnancies and caring for sick family members, which were not captured by the health variable included in the quantitative models.

In the multivariable model, being partnered, and completing high school increased participants' likelihood of enrolling in the SCFP. While the literature has been mixed, these findings to align with some studies from high-income countries (Dumka et al., 1997; Reyno & McGrath, 2006; Winslow et al., 2009).

While a number of parent-focused variables have been discussed above, only one child-focused variable was associated with enrolment. There was a moderate association between a higher number of reported child behaviour problems at baseline and an increased likelihood of enrolling, both in the univariable and multivariable models. This finding aligns with several studies conducted in high-income contexts (e.g., Dumas et al., 2007; Haggerty et al., 2002; Winslow et al., 2009), and may reflect that parents perceived a need for the programme

(Perrino et al., 2001). When parents were first recruited for the study, they were told that the project was about parenting and that the SCFP would help parents learn how to manage children's difficult behaviour. Therefore, parents who reported higher levels of child behaviour problems may have been motivated to enrol in the programme as they saw it as a means to learn how to address their child's misbehaviour.

Being in Wave 2 was weakly associated with enrolment in the multivariable model. One possible reason for this is that facilitators would have had more experience in encouraging parents to enrol, and may have been more likely to mention that the programme would provide meals and transport reimbursements.

Regarding SES, qualitative data indicated that low SES appeared to be a significant barrier to enrolling in the SCFP - aligning with findings from programmes implemented in low-income contexts in high-income countries (Baker et al., 2011; Chacko et al., 2016). Here, it is important to note that while all participants lived in very poor communities, there was still variation in their SES based on the number of grants received in the household and employment of household members. One of the ways in which SES emerged as a barrier was through non-enrolees speaking about how a lack of money for transport to get to the programme, as well as hunger, prevented them from enrolling. The latter point is particularly interesting since there was moderate evidence from the enrolment model that higher levels of household hunger were associated with an increased odds of enrolling. When examining field notes, it became apparent that many of the non-enrolees did not receive an in-person pre-programme consultation with a facilitator. When facilitators were unable to reach participants at home, they discussed details of the programme with them telephonically or left messages for them with their families. It may have been that facilitators went into greater depth about the intervention during in-person consultations and ensured that participants understood that food would be provided and transport costs reimbursed – which may then

have served as a facilitator to enrolment, especially for those participants who experienced high levels of hunger. Participants may also have felt more comfortable talking about barriers to engagement when a facilitator was with them in person.

Another way in which SES impacted enrolment was through participants gaining employment between the baseline assessment and the start of the intervention and citing this as the reason for not enrolling in the SCFP. Due to unstructured work schedules and long working hours, switching the day on which they would receive the programme was not always a solution for participants. Also, evening sessions, which have been advised on the basis of studies in high-income countries (Dumka et al., 1997; Gross et al., 2001), were not an option due to safety concerns in the targeted communities. Alternate delivery methods that are accessible to working parents (such as workplace delivery) must be considered.

The factors mentioned above are likely to play out within real-world implementation, when there is no study alongside the programme. Since this study was nested within a research trial, it was important to gain a sense of how the research may have impacted levels of enrolment in the SCFP. Therefore, participants were asked about their experience of the baseline research visit, which included a survey and observational assessment. From their responses, it appeared that the baseline assessment did in fact play a role in enrolment. Qualitative data indicated that three non-enrolees seemed to have confused the research visits with the programme. These participants may not have fully understood the contents of the information sheet read to them (even though it was left at their homes for them to read at leisure, and was written in simple isiXhosa) during recruitment for the RCT, which outlined the research visits and intervention. Studies from both high-income and low-and middle-income countries show that research participants frequently do not understand critical components of trial design, such as randomisation, and what is required of them during the study (Cohn & Larson, 2007; Jewkes et al., 2012; Stead, Eadie, Gordon, & Angus, 2005).

Additionally, a study by Barsdorf and Wassenaar (2005) found that out of the black, white, and Indian racial groups in South Africa, black people were the least likely to refuse to participate in medical research, possibly because they had a lower sense that they could choose not to participate. Because of this lower sense of volunteerism, it may be that some participants in the SCFP trial did not engage sufficiently with the recruitment documentation, but simply said "yes" without fully exploring the implications of their decision. Unfortunately, facilitators were unable to reach these non-enrolees before and during the programme because they were not at home for home visits and did not answer their phones or respond to the messages left with family members for them - in future, it may be helpful for implementers to view this lack of contact as a marker of risk for non-enrolment in parent training.

Another possible reason for the confusion may have stemmed from the structured task used in the observational assessment, which involved the research assistant bringing toys and a food parcel into the home, and requesting mothers to interact with their children in various tasks that were set up to include to include play and a snack. The fact that this task was structured may have meant that caregivers interpreted it as an intervention. It might be that a different task or approach to the assessments, such as spending time with the mother and then videoing her and her child when they had got comfortable with the observer, may have made parents feel that it was less of an "intervention". Also, since there is a risk that bringing in groceries and toys (both of which are much-needed in poor households) may have affected the way in which parents and their children behaved, a different approach may also have enabled more natural, everyday parent-child interactions.

Recently, some researchers have used more passive measures during observational assessments. For example, studies that assess language and cognitive development, including an evaluation of a mother-infant book-sharing intervention in Khayelitsha (P. Cooper,

personal communication, 13 February 2017), have used technology, such as the LENA System software and "talk pedometer". The device, which is built into a comfortable vest that the child wears, records children's language throughout the day and is then uploaded to a computer via the software, which uses programmed algorithms to calculate output data.(Suskind, Leffel, Graf, & Hernandez, 2016; Weil & Middleton, 2010). Ways in which this type of technology could be used to assess outcomes within the context of behavioural parent training should be explored.

Many enrolees, and the three non-enrolees mentioned above, commented on how they found the interview process helpful as it made them reflect on their parenting and also provided an opportunity to talk about challenges in their lives. This experience may well have been a facilitator to enrolment for some participants as it may have assisted them in deciding that they may benefit from learning new parenting skills or from gaining the support of a parenting group. Participants' reflections on their parenting, and then acting on those reflections, may assist in explaining why there were improvements in the control group in addition to the intervention group. In order to measure the impact of the baseline assessment, future studies may wish to use a Solomon four-group design as it includes a post-test only control design (Solomon, 1949). Baseline assessment procedures for the RCT did not appear to deter participants from enrolling in the SCFP.

Attendance at the SCFP

Of the 110 parents who enrolled in the SCFP, the average overall attendance (i.e., group sessions plus home visits) rate was 8.38 out of 12 sessions or 69.83% of the programme. While this rate is slightly lower than in the pilot trial, which was 8.58 out of 12 sessions or 71.59% of the programme (Lachman et al., 2016a), it is consistent with studies of parenting training interventions of a similar length from high-income countries (Chacko et al., 2016; Hutchings et al., 2007; Stattin, Enebrink, Özdemir, & Giannotta, 2015).

Attendance rates fluctuated across the 12 sessions, with the final session having the highest attendance at the venue. This peak at the end of the programme was likely due to the celebratory nature of the session, the expectation of an incentive, and the desire for a sense of closure after a fairly lengthy process (Baker et al., 2011). Regarding dropouts, there were more in the larger RCT (n = 22; 20% of enrolees) than in the pilot (n = 8; 14% of enrolees) (Lachman et al., 2016a).

During implementation, facilitators were unable to conduct between-session home visits for all participants who missed sessions or who appeared to struggle with programme content (although they did manage to do some home visits). While these visits may have enhanced engagement, facilitators experienced several challenges to conducting them. Some participants were not at home at appointment times, or, as described in the qualitative interviews, hid away from facilitators when they arrived at their homes to conduct home visits. This wasted the limited time available for visits, especially since facilitators walked to participants' homes. Telephonic consultations were often not possible as participants did not always have their own phone or phones would go straight to a voicemail service.

In the RCT, facilitators had roughly 18 participants in their caseload per study wave. This number is higher than what is advised for the Incredible Years programme in Wales, which recommends no more than 12 to 14 parents per facilitator so that they are able to conduct all necessary home visits (J. Hutchings, personal communication, 16 February 2017). Lower caseloads have been found to contribute to better enrolment and retention rates within the context of the Healthy Families America home visitation programme, which recommends 12 to 15 parents per home visitor (Daro, McCurdy, Falconnier, & Stojanovic, 2003). While reducing caseloads may be ideal, it may not be feasible within the context of real-world delivery, particularly in contexts (like South Africa) where resources are scarce.

Few of the variables included in the univariable and multivariable models were associated with the odds of missing a session of the SCFP, and those that were, were related mainly to child demographics, SES-related variables, and discipline use. In the multivariable model, there appeared to be moderate evidence of an association between having completed high school and this process outcome. This result is in contrast to other studies, which have found a relationship between a higher level of education and higher attendance and less dropout (Firestone & Witt, 1982; Haggerty et al., 2002; Reyno & McGrath, 2006; Spoth et al., 1999; Spoth & Redmond, 1995). A possible explanation for this finding is that parents who completed high school may have been more likely to get the "piece work" discussed in the qualitative interviews, and were therefore unable to attend the programme. Also, some participants felt that attending the programme was like "going to school" and that this had negative connotations – however, this was raised by high attenders reflecting on why other parents missed sessions, and not directly by those who had missed sessions.

As in the enrolment model, discipline use was associated with the odds of missing a session, although the relationship was weak. Parents who used higher levels of emotional punishment and physical punishment had lower odds of missing a session. As mentioned, this result aligns with findings from studies on engagement in high-income countries, which found that higher levels of poor parenting at baseline was associated with better engagement (Baydar et al., 2003; Gorman-Smith et al., 2002). It may be that parents were finding it helpful learning positive alternatives to the negative parenting that they had been using and so were more motivated to continue attending sessions.

In terms of child demographics, both child sex and age were associated with the odds of missing a session in the SCFP, but only in the univariable model. There was a moderate association between being a parent of a male child and greater odds of missing a session, and a weak association between being a parent of an older child and lower odds of missing a

session. Very little research has explored the relationships between these variables and attendance, and they should be explored in future studies to determine whether retention strategies should be shaped for specific groups of parents.

The quantitative analysis also showed a large participant random effect, which indicates that factors related to individual participants, and which were not captured by the included variables, played a central role in whether or not a participant missed a session. Since it was commonly raised in the qualitative interviews, and has been shown to predict engagement in other studies (Dakof et al., 2003; Nock & Photos, 2006), one of these factors may relate to parents' level of motivation or readiness to change. The qualitative data suggests that high attenders had understood the goals of the programme and had made the assessment that the programme was likely to benefit them in some way. They also appeared to show greater levels of motivation, some even shifting groups for the odd session so that they would not miss any content. Although this could reflect more motivation, or more efficient problem-solving skills and flexibility, it could also be that these parents had greater means to overcome barriers, perhaps through higher levels of social capital or household income. Future studies would provide a useful contribution to the literature if they explored the role of motivation as well as readiness to change within the context of parent training in low-income countries.

With regard to SES-related variables, in the univariable model, having higher household hunger was weakly associated with lower odds of missing a session. Those parents who were most hungry may have been encouraged to attend because of the meals provided at sessions. In contrast to this finding, having someone employed in the household was weakly associated with lower odds of missing a session, again only in the univariable model. Through having someone employed in the household, parents may have had greater financial means to address barriers to engagement, such as childcare. This thought aligns

with the qualitative data in which participants talk about how not having childcare was a barrier to attendance. Also, participants reflected on other ways in which low SES served as a barrier to attendance, which included having to wait in long queues for medication (and therefore missing the group meeting), job seeking, and obtaining short-term employment or "piece work".

Possibly due to the poverty in the targeted communities, the issue of incentives was repeatedly raised in the individual interviews. There was a sense that many participants, especially low attenders, had an expectation of some incentive (aside from meals and childcare) for attending sessions, be it a grocery voucher or food parcel – possibly due to grocery store vouchers being provided after research visits. The literature has been mixed on the potential of monetary incentives to enhance engagement. In Germany, Heinrichs (2006) investigated how monetary incentives per session (maximum of US $145 if all eight programme sessions were attended) and intervention setting (e.g., individual versus group) affected the engagement of families from socially disadvantaged communities in parent training. Families were either allocated to receive monetary incentives and individual sessions, monetary incentives and group sessions, no payment and individual sessions, or no payment and group sessions. The author found that regardless of delivery format, those who were offered the incentive were more likely to enrol and have higher attendance than families who were not offered the incentive.

Gross and colleagues (2001) examined what motivated low-income urban parents of colour in the USA to participate in or dropout of parent training. They found that while 52% of parents felt that monetary incentives were important, only 2% of them stated that money was what motivated them to participate. The authors explain that while money may have interested parents in the training, it was not a key motivator for attendance. This explanation is supported by Ingoldsby (2010), whose review of RCTs of interventions to increase

engagement found that while monetary incentives may increase families' initial interest in accessing services, they do not influence later attendance or programme completion. Since the studies on these incentives have been conducted in high-income countries, and the findings have been mixed, it is important that future studies investigate their role within the context of low- and middle-income countries.

Parental alcohol misuse was frequently identified as a barrier to attendance in the qualitative interviews. Many participants commented on how other group members misused alcohol, which may have affected their attendance, while some participants spoke about their own drinking as a reason for missing sessions. Also, from a delivery perspective, it was interesting that participants mentioned that there were drunk parents in their parenting group yet facilitators did not raise this during weekly supervision sessions - one would expect that they would have noticed unusual behaviour during role-plays or group discussion. Facilitators did, however, comment on alcohol being a barrier to attendance.

Despite the frequent mention of alcohol in the interviews, parental alcohol misuse was not associated with any of the engagement components in the quantitative models. This misalignment might be because the survey item on alcohol misuse asked parents if they had had three or more drinks on one occasion in the past month (an indicator of risky drinking that has been used in other studies in Cape Town to identify risky drinkers; Mertens et al., 2014), which may be capturing something different. The same situation was seen for health concerns in that comments from participants related to the severity of conditions and clinic waits rather than the number of health problems they experienced, which was included in the models and only weakly and positively associated with enrolment (and not attendance or home practice).

In terms of programme-related factors, participants appeared to like the programme and frequently commented on how it was a source of social support for them – although social

support was not associated with attendance (nor enrolment and home practice) in the quantitative analysis. Few programmatic barriers came up during the individual interviews, which aligns with feedback from the satisfaction survey. However, participants may have had concerns with the programme but may not have felt comfortable talking to the interviewer about it. Also, satisfaction scores may be elevated due to social desirability response bias as well as many participants having nothing to compare the service to.

Level of Home Practice Completion in the SCFP

While there was a considerable amount of missing data on home practice, of the forms that were submitted, 36.20% of them indicated that the participant had practised the new skill each day of the week. Few studies have reported on home practice completion rates, with Chacko and colleagues (2016) finding that only 16 out of 262 studies (6.11%) of parent training programmes including data on this variable. Eight of these studies provided an overall home practice completion rate, with the average being a rather low 48%. The authors argue that more studies should document this process because the mechanism of action of behavioural parenting programmes is hypothesised to occur through parents implementing taught skills between sessions.

Although results must be interpreted with caution, the quantitative models indicated that programmatic, parent and child factors were associated with the level at which participants completed home practice tasks. Both the univariable and multivariable models indicated that the pair of facilitators that led the groups appeared to be strongly associated with the extent to which enrolled participants completed their home practice. Research within the context of family therapy for adolescents with behaviour problems has found that the quality of the parent/therapist relationship may play a central role in enhancing parental engagement (Robbins, Turner, Alexander, & Perez, 2003). This finding points to the need to ensure that facilitators receive adequate training that includes content on developing

relationships with parents and strategies to enhance parents' participation both within and between sessions.

In terms of parent-related variables, depression emerged as strongly and positively associated with the level of home practice completed, but only in the univariable model. While no studies appear to have investigated the impact of depression on home practice per se, Dumas and colleagues (2007) and well as Nix and colleagues (2009), both based in the USA, found no association between depression and quality of participation more broadly. In the context of the SCFP, it may be that depressed parents found home practice to be a rewarding experience, and something positive in their lives, and so were encouraged to practice more regularly.

There was moderate and weak evidence of a relationship between being partnered and greater home practice completion in the multivariable and univariable models, respectively. This finding aligns with the qualitative data which indicated that parents found having support from family members to be a facilitator of implementing new skills at home. Parent-focused variables that were weakly associated with greater home practice, but only in the univariable analysis, included being partnered and considering fewer positive parenting behaviours as problematic to implement. Only one child-focused variable, child sex, was predictive of home practice completion. In the multivariable model, there was weak evidence that being the parent of a male child was associated with greater odds of practising more – here it is relevant to note that there were no differences in levels of difficult behaviour at baseline by gender. In high-income countries, few studies have explored child sex as a possible predictor of quality of participation, although Dumas and colleagues (2007) found no association between these variables. Further research is needed to understand fully the impact of child sex on engagement variables within contexts such as those targeted in this study.

In the weekly parent-report forms, parents stated that they felt confident in implementing skills at home. However, numerous factors raised in the interviews, such as health concerns, alcohol misuse, and motivation for change, may have impacted their ability to implement taught skills at home. Barriers to completing between-session tasks for parent training do not appear to have been explored systematically in the literature, and, due to the importance of this process outcome, should be the focus of future studies.

Dose-Effect Relationships

As mentioned in the introduction to this chapter, this study found that, when excluding Wave and IPV as possible moderators, higher attendance of SCFP sessions was associated with better programme outcomes at post-test. This was true for all outcomes, except for observed negative parent and child behaviour where there was no such relationship.

When including moderators, it was apparent that different categories of participants (i.e., those who were in Wave 1 versus Wave 2, and those who experienced IPV in the past month versus those who had not) responded differently to the programme with increased attendance. The frequency of positive parenting was the only outcome that improved for all participants with increased attendance. Participants in Wave 1 did not benefit as much as those in Wave 2, which may be due to the sense of learned helplessness in the community in which the first wave of the study was conducted. Aside from community-level factors, another possible reason for better outcomes for Wave 2 participants was that facilitators would have had more experience of facilitating the programme than they would have had for Wave 1.

I had expected that parents who experienced IPV in the past month would not benefit from attendance as much as parents who had not experienced such abuse. Therefore, given the high levels of IPV in South Africa and other low- and middle-income countries (World Health Organization, 2013), it is encouraging that for some outcomes they benefitted

significantly from increased attendance, and, for a subset of these, even more than those who did not experience abuse. On the outcomes where those with IPV benefitted more, the two groups of parents had similar scores at baseline, with the exception of observed positive child behaviour.

I also expected that parents who experienced IPV would use higher levels of harsh parenting, as is reported in the literature (Kelleher et al., 2008; Levendosky & Graham-Bermann, 2000; McGuigan & Pratt, 2001). Findings from the study align with this expectation, as these parents did, in fact, use more physical and emotional punishment than parents who had not experienced IPV. Unfortunately, the programme was not able to impact those with IPV more than those without IPV and, even worse, only benefitted those in Wave 2. In fact, physical punishment increased at the one-year follow-up for participants who experienced IPV. This finding indicates that the SCFP may need tailoring to target parents who experience IPV and are using high levels of harsh discipline.

Implications for Practice

Several implications for practice can be drawn from the findings of this research. It is important to emphasise that since parents were allocated to receive the SCFP as part of an efficacy trial, their experience of the intervention may be different to parents who may receive it within the context of routine practice in the future (Mihalic, Irwin, Elliot, Fagan, & Hansen, 2001). The SCFP is being implemented widely in a number of countries in sub-Saharan Africa, and so lessons from the field will be useful in understanding how the programme is taken up within settings where there is no trial. Findings from this study, however, indicate that levels of engagement are comparable to programmes in high-income countries, which adds support to the feasibility of parent training in low- and middle-income countries (Knerr et al., 2013).

Avoiding assumptions. Programme teams should be careful not to make assumptions about parents' circumstances, lifestyle, and programmatic preferences. The SCFP team assumed that having the programme implemented during the day would mean that unemployed parents would attend, that parents would walk to the programme if it was less than a kilometre away, and that they would receive reminder SMS's, when none of this was necessarily the case. Gross and colleagues (2001) suggest that researchers view research participants as consumers, and ask them which recruitment and retention strategies are meaningful to them. This process could then inform programme design and implementation to enhance engagement.

Importance of pre-programme consultations. Study findings support the important role of pre-programme consultations in effective recruitment and retention (Ingoldsby, 2010; Spoth & Redmond, 2002). They provide an opportunity for facilitators to explain the intervention in more detail, address any practical barriers that participants may have, and assess participants' readiness to change. Motivational interviewing techniques, which have typically been applied within the context of retention in mental health services (Miller & Rollnick, 2012), could be incorporated into these consultations to enhance engagement (Ingoldsby, 2010). These collaborative techniques aim to reduce resistance and increase commitment to change by addressing the ambivalence that individuals may experience about engaging in a behavioural intervention (Miller & Rollnick, 2012).

Enhancing family involvement. Having the support of family was identified by participants as a facilitator to engagement in the SCFP. If families approve of the intervention and support their family members' participation in it, they are more likely to encourage their engagement and support them in implementing positive parenting strategies in the home (Perrino et al., 2001; Whittaker & Cowley, 2012). For instance, using family therapy techniques to gain family members' assistance to engage participants has shown to be

successful within the context of drug abuse treatment for mothers with substance-exposed infants in the USA (Dakof et al., 2003). The pre-programme consultation may provide an appropriate opportunity to implement these techniques.

Encouraging the attendance of co-parents is another strategy to enhance family involvement (Panter-Brick et al., 2014). While this was done in the RCT of the SCFP, only five participants brought co-parents, who were all female relatives, to sessions. The fact that these co-parents were all female is not surprising since, in the South African context, parenting responsibilities are often shared with grandmothers, aunts, or siblings due to a common lack of father involvement in households (Bray & Brandt, 2007). In the Sinovuyo sample, 53% of participants said that the father was not involved in the household. The low turnout of co-parents at the SCFP may be due to many reasons, including that facilitators may not have encouraged parents enough at the pre-programme consultation to bring co-parents, because participants did not want to talk about their parenting or personal issues in front of someone from their household during sessions, or because co-parents were busy at the time of the programme or simply did not want to attend. Although experiences may vary between contexts, feedback from an evaluation of a school-based parenting programme that aims to prevent IPV among school students living in low-income communities in South Africa, suggests that co-parents and parents should be in differents groups. The rationale for this is to avoid tension between caregivers, which may undermine productive engagement, and to encourage both parties to be open and honest about their experiences as a caregiver (N. Jama-Shai, personal communication, 16 October 2016).

Although fathers may be hard-to-reach, as evidenced by there being only one father in the SCFP trial (who was allocated to the control group), it is necessary to consider how best to engage them, especially since some participants had recommended that they be included in interventions, and since family support is associated with better engagement (Perrino et al.,

2001). Also, father involvement in children's lives is important for their wellbeing (Amato, 1994). While there is limited knowledge of how best to engage fathers in parent training (Panter-Brick et al., 2014), available evidence suggests that programmes consider father-only groups (Fabiano et al., 2009) and be mindful of how they include fathers in programme materials (Kohl & Seay, 2015). To expand on the latter suggestion, feedback from African American fathers on the acceptability of Triple P indicated that they felt that there were too few fathers, and especially African American fathers, in the programme DVD (Kohl & Seay, 2015). They also commented on how the language used in the film was not accessible to the black community.

Incentives. In line with recommendations in studies from high-income countries, programmes in low-income contexts may enhance engagement by incorporating practical incentives, including transport, childcare, and meals (Axford et al., 2012; Dumka et al., 1997; Ingoldsby, 2010). In terms of transport, programmes could provide reimbursements for travel expenses or offer a shuttle service. While some participants walked to the programme to receive the travel reimbursement, which may have been a facilitator to attendance, a shuttle service may have even more benefits. Firstly, parents would not have to worry about having to set aside money each week to attend the programme. Secondly, parents may be encouraged to come to sessions if they knew that a shuttle would be coming to collect them. Thirdly, having a shuttle would ensure that parents would not have to walk in the rain and get cold and wet (a particular issue for poor parents who may have limited changes of clothing or ability to get warm again). Finally, it would also reduce safety concerns, which are particularly relevant in high-risk communities such as those in which the SCFP was run.

During sessions, offering childcare that is engaging and fun for children would likely increase enrolment and attendance rates. Parents would not have to worry about finding childcare, and their children may encourage their parents to attend. High-quality childcare

may also have benefits for the children themselves as many of them were not enrolled in crèche or pre-school and so may not have been receiving the early childhood development support that they needed (L. M. Anderson et al., 2003). Providing meals is also advised, especially when participants' are experiencing high levels of hunger (Axford et al., 2012).

Workplace delivery. Since gaining employment was identified as a barrier to enrolling in and attending the SCFP, workplace delivery of parent training may be necessary to reach working parents in future. Not only are the outcomes of these interventions attractive to employees, but they provide a captive audience for service uptake. In Australia, an RCT of Workplace Triple P, which was designed specifically for delivery within the workplace, significantly lowered parents' stress levels and dysfunctional parenting, as well as strengthened their levels of work commitment, work satisfaction, and self-efficacy (Sanders, Stallman, & McHale, 2011). In the USA at least 60% of Fortune 500 companies (top contributors to the US GDP) offer their employees parent education (Roban, 2016). Whether or not these companies see parenting programmes as ultimately contributing to their profits, the fact that they are being implemented widely at least shows that it is feasible.

In South Africa, many working mothers work as domestic workers, which often includes childcare duties. One way in which to target these parents may be for neighbourhoods where they work to organise and pay for trainings for them that include a focus on positive parenting skills. These trainings do exist in the country (e.g., see Super Nannies: http://www.supernannies.co.za/training/nanny-training-course-details/), but currently only reach a handful of workers and the components on positive parenting need to be strengthened and include evidence-based strategies. This type of delivery method is likely to be attractive to employers as it can be run during working hours (if childcare is provided) and so their employees do not need to take time off to attend sessions. Also, their children as well as the children of their employees would likely benefit from the intervention.

Programme "add-ons". Parents in South Africa are parenting under challenging circumstances marked by poverty, illness, and violence. In order to best support them, it may be necessary to consider how "add-ons" to programming may improve their livelihoods, and potentially reduce some of the barriers to engagement. The SCFP is currently being culturally adapted and pilot-tested in the Philippines, and will ultimately be tested as part of a government-funded conditional cash transfer intervention, the Pantawid Pamilyang Pilipino Program (Fernandez & Olfindo, 2011). Findings from this work will provide useful insight into whether combining parent training with conditional cash transfers increases engagement, while reducing poverty.

Another way to provide additional support to parents is by having a referral system through which to connect them with more specialised services, such as those for substance abuse, when necessary. Referrals may be challenging within real-world implementation, especially within contexts where service providers are overburdened and may not have the time needed to follow-up on all referral requests (Baingana, 2010). During research trials, the referral process is likely made easier as there is typically a dedicated Trial Manager who is able to follow up on cases.

Integrating parenting programmes within existing services, such as Early Childhood Development centres or NGOs, may be a useful means of enhancing recruitment and retention. Parents would likely already be used to and have trust in the system, which may have a positive impact on enrolment rates. However, this integration may exclude those parents that do not use that service (for instance, who do not send their children to crèche). If the programme were implemented within an NGO that offered other programming or services, parents would have some form of continuity after the programme has ended. For example, there are plans for the version of the SCFP for parents of 10- to 17-year-olds to be integrated within the Isibindi programme, a community-based care and protection

intervention run by South Africa's National Association of Child Care Workers (NACCW) (J. Lachman, 15 March 2017, personal communication). Through Isibindi, parents would not only receive parenting support, but would also have access to a range of additional services, including empowerment programmes for young men and women as well as Early Childhood Development services (NACCW, 2017). They would also have continued contact with their parenting facilitator, who could therefore provide advice and encouragement that continues well after the programme has finished.

Implications for Research

While this study has begun to provide some insight into the process of engagement within a parent training programme in a low-income country, it has also identified several areas to be investigated in future studies as well as strategies to strengthen study design and data collection procedures. Several suggestions for research are made below.

Impact of incentives. Since providing incentives, including meals, transport reimbursements and childcare, appeared to be important facilitators of engagement, future research should explore their quantitative impact on this process (Heinrichs, 2006). While trials of programmes, including the RCT of the SCFP, include these incentives and recommend them for future rounds of implementation, little is known about their effectiveness in increasing engagement, especially in real-world contexts where funds are much more limited than in trial settings.

Cognitive interviewing. Through conducting this study, the research team realised that process data quality may be improved in future studies by incorporating more complex survey pretesting procedures to detect possible issues relating to participants' understanding of the items as well as the variability of responses. These procedures could include cognitive interviewing, which is a diagnostic technique that draws from both social and cogntive psychology and has now been widely used in survey development (Collins, 2003; Desimone

& Le Floch, 2004; Willis, 2004). Cognitive interviewing explores the cognitive processes that participants use to understand and answer survey items (Collins, 2003). It allows researchers to identify problematic wording and survey structure, whether the survey items are being understand in the way that was intended, as well as gain a sense of how long the survey will take to administer (Collins, 2003; Willis, 2004).

Aside from thorough piloting of measures, facilitators should receive guidance during supervision sessions on how to make sense of process information so that it can be used to address implementation issues and identify challenges that participants may be experiencing.

Analysis approach. Further sophistication could be added to the analyses, where the sample size is sufficient to allow for additional variables to be included in the models, by accounting for session number in all models and for the days of the week in the home practice (i.e., temporal autocorrelation) – in this study, each of the sessions and days of the week were viewed as the same. More generally, while this analysis focused on relationships between predictors and each outcome in turn, a more general multivariate analysis approach could be considered to model the relationships amongst the different outcomes simultaneously - for example, structural equation modelling could be utilised.

Choice of study design. The analysis of the outcome data indicated that the control group also improved on several outcomes. As mentioned, this improvement may be the result of a pre-test effect in that the survey items and observational assessment may have made parents reflect on their own parenting and then act on those reflections. One of the outcomes where an improvement was seen for both the control and intervention arms was the number of positive parenting behaviours they found problematic to implement (i.e., PARYC Problem score). Although speculative, through reflecting on their use of positive parenting and then having to play with their child during the observational assessment that followed, parents may have been encouraged to try more positive parenting techniques and found them

less challenging to implement. There is also the possibility that participants tried to respond in ways that were the most socially desirable. Although more costly than a trial with only two arms, future studies may wish to use a Solomon four-group design to determine the impact of the baseline assessment on targeted outcomes (Solomon, 1949). This design includes two factors, each with two levels: intervention versus control group, with and without a pre-test assessment (Solomon, 1949).

Retention of control group participants. The RCT had an exceptionally high retention rate of control group participants at the post-test (97% for surveys; 90% for observational assessments) and one-year follow-up (92% for surveys; 71% for observational assessments) despite it being a services-as-usual control group. Researchers who are planning RCTs may find the retention strategies used in the SCFP RCT useful. The SCFP research assistants conducted door-to-door recruitment, which enabled them to form a rapport with parents more easily than over the phone or via a letter. Research assistants, who were from similar backgrounds to participants, were highly skilled at creating a space in which participants felt appreciated for their participation in the study and safe to share their personal information. The research team feels that through participants having a positive experience of the research, they were more likely to allow research assistants to conduct subsequent assessments. Research assistants were also very persistent and went to participants homes several times until they could reach them – following up with participants may well be easier in a context with high unemployment as parents are likely to be at home for more hours than employed parents. Providing grocery vouchers, which were of increasing value for each subsequent assessment, and offering a certificate for completion of all assessments likely played a role in the high retention rate.

Implications for Theory

Since different baseline factors were associated with enrolment, attendance, and home practice completion, this study adds support to the notion that engagement comprises distinct components that should be investigated individually (Baker et al., 2011). Through understanding each of these components, strategies to increase parents' likelihood of joining a programme, attending a sufficient number of sessions, as well as participating meaningfully can be developed – and so increase the likelihood of parents achieving better outcomes from the intervention. Theories of engagement should consider the "pathway" of engagement, from intention-to-enrol through to quality of participation, and then on to programme outcomes.

Since this study was the first to attempt to explore engagement in parent training in a low-income country, further research is needed to continue to build towards the theories of engagement within the context of poverty. Certain elements of social cognition models, such as the health beliefs model (Rosenstock, 1966) and the theory of planned behaviour (Ajzen, 1991), emerged strongly from the qualitative and quantitative data. For example, in the quantitative model, parents who reported a higher number of child behaviour problems were more likely to enrol in the SCFP – this aligns with health beliefs model constructs of perceived susceptibility, severity, and benefits (Winslow et al., 2009). Also, higher attenders appeared to be more motivated and ready to change, which ties in with the concept of perceived behavioural control from the theory of planned behaviour. While it would be valuable to explore the applicability of these models in low- and middle-income contexts, one possible shortcoming is that they may not give sufficient consideration to the complex situations in which parents in poverty live. For example, as much as a parent may want to join a programme and as much as they may have the support of family, if they do not have food for their children their priority may be to look for food rather than attend parent training

– this type of barrier is certainly not "perceived", but very much a harsh reality for many parents.

McCurdy and Daro's (2001) conceptual model of parental involvement in family support programmes, which borrows from social cognition models, and incorporates individual characteristics of the parent and family, facilitator attributes, programme characteristics, and neighbourhood factors, is a better fit to the South African context. For example, factors raised in this discussion, such as facilitator caseload and participants' experience of the programme are included in the model – these do not appear in the health beliefs model and theory of planned behaviour. While this model seems to offer a better fit, it still overlooks some of the barriers and facilitators relating to structural and personal factors that were often raised in this study. These include parental alcohol misuse, participant health, as well as factors relating to low SES, such as employment and household hunger.

Study Limitations

Like any study, this doctoral work, as well as the RCT in which it was nested, has limitations. One that applies to both studies is that the outcome measurements used in the RCT, with the exception of the BDI-II (Steele & Edwards, 2008), have not been validated for populations in South Africa. Although most of the measures have been used in low-income contexts, their psychometric properties have yet to be evaluated as to whether they measure the same constructs as originally intended. Like in any new setting, there may be unique cultural, linguistic and contextual factors that may affect their validity. To strengthen the credibility of evaluation findings going forward, it is critical that validation studies be encouraged in South Africa. This being said, these studies take an enormous amount of time in the midst of there being an urgent need for tested parent training programmes in the country (Ward, Sanders, Gardner, Mikton, & Dawes, 2016). The concurrent need for

validated measures and evidence-based programming poses a substantial dilemma in the applied field.

It is also important to consider that the survey consisted of more than 200 items, many with abstract ratings and concepts with which they might not have been familiar or comfortable. Despite research assistants reading survey items and response options aloud, and there being a refreshment break halfway though, the survey length and complexity may have led to some level of respondent fatigue and careless responding, especially since the majority of participants had a low educational status (i.e., only 18% had completed high school). It may be beneficial for future studies working with families with low educational status to explore shorter survey options.

There were several other limitations to the quantitative components of this thesis. The first of these is that there was no objective measure of participants' quality of participation during the intervention. This not only prevented an understanding of the construct itself, but also of what factors predicted it and how it shaped treatment outcomes. Research has indicated that it is necessary for parents to engage with programme content, both during and between sessions, rather than simply attend sessions, if they are to achieve the greatest benefits (Baydar et al., 2003; Berkel et al., 2016; Nix et al., 2009). The facilitator checklists, which required facilitators to rate participants' quality of participation, could not be used within the models due to a lack of variation in scores. This issue points to possible challenges with the tool itself and the need for refinement, as well as possibly to training of facilitators in completing forms accurately - in order to optimise the usage of collected data in future studies, researchers should explore this further within their context. Although sessions were filmed, and so participants' quality of participation could be coded that way, no one in the research team is proficient enough in isiXhosa to code the videos. Unfortunately, it would be too costly and logistically complex to have the videos translated from isiXhosa to

English and then coded by team members.

A process evaluation which ran alongside the RCT of the SCFP for parents and teens aged 10 to 17 (which began after the RCT of the SCFP for 2- to 9-year olds), used research assistants to code participants' quality of participation and facilitators' implementation fidelity live, during group sessions (Cluver et al., 2016). Yulia Shenderovich, who conducted the evaluation, explains that in order for live coding to be successful, participants and facilitators should not feel watched, the effect of observation on outcomes should be considered, and that training on the coding scheme should be as extensive as possible (Y. Shenderovich, personal communication, 27 February 2017). She also suggests that research assistants who conduct live coding complete facilitator training themselves so that they fully understand what it is that the facilitators are meant to be delivering (Y. Shenderovich, personal communication, 27 February 2017).

A second limitation, or perhaps more of a consideration, is based on the approach taken to classify sessions delivered via home visit as the same as those delivered via group format when calculating attendance. It may be that the participants who received sessions via home visit received the programme content, but did not benefit from the group experience, which has been associated with programme effectiveness in other studies (e.g., Borden et al., 2010). Future studies that explore the association between attendance and programme outcomes may wish to classify delivery via these two methods differently so as to gain a more nuanced understanding of their impact.

Another consideration based on classifications used in this study is that although the control group participants were considered the same as intervention group participants who attended no sessions, there is a fundamental difference. This difference relates to the control group having no option to attend, while intervention group participants had an option to attend and could choose not to. These two types of participants may differ in some way, and

this could not be captured using the approach taken. Despite this limitation, it was necessary to combine groups in order to have an adequate sample size for the dose-response analysis.

A third limitation of the quantitative work was the large number of presented analyses and *p*-values. In every statistical hypothesis test, there is a chance of drawing the incorrect conclusions in each direction. Given the sizeable number of *p*-values presented in this study, there is likely some Type 1 error when viewing this work as a whole. I chose not to apply multiple comparison adjustments, a task which in itself would require defining which specific error rate should be controlled and how. Instead, I explicitly framed this work as an exploratory study, acknowledged the large number of *p*-values and attempted to focus on their magnitude rather than the classification of significant or not significant.

Fourthly, the sample size available to explore the relationships of interest was small, and so the findings may not be as robust as if the study had included a larger number of parents. The reason for the considerable number of parameters was the exploratory nature of the study. Additional research is needed to develop our understanding of the predictors of engagement and the relationship between attendance and programme outcomes further. A final limitation relating to the quantitative analysis is that when modelling the ECBI Problem Scale as an outcome in the dose-effect model, we did not account for the truncated distribution of scores which was a result of using this measure as a screening tool.

There were also several limitations to the qualitative component of the study. Firstly, I only interviewed a small purposively-selected sample of 32 parents from the total intervention group of 148 parents. Thus, the views and experiences of parents who informed this study might not have been representative of all non-participating parents. However, similar themes emerged during the interviews, especially within each category of attendance, indicating that saturation of themes had likely been reached. Also, the interviewed group was comparable to the larger pool of participants on most variables at baseline.

Secondly, in order to create a space in which parents felt comfortable, those who appeared to be somewhat resistant to talking about their experiences were asked to reflect on what they thought was the case for other parents who were invited to attend the SCFP. While this approach may have raised valid responses, it is necessary to consider that it is quite possible that their assumptions were simply wrong. Attributional research indicates that the reasons people give for their own behaviour can be very different from the reasons they give for the same behaviour in others (Jones & Nisbett, 1971).

Thirdly, since the idea for this study was only conceptualised after programme delivery had been initiated, it was not possible to collect data on participants' intent to enrol, which is the first step in the engagement process. This data is useful since participants' decision to participate in the RCT does not necessarily imply that they intended to enrol in the programme if assigned to the intervention group. They may have been attracted to the study because of the incentives after the assessment, or may have known that they had significant barriers that would make it challenging to enrol in the programme. In future studies, it would be useful to ask parents before the start of the intervention about perceived barriers to engaging in the programme. This type of data has been collected by researchers, such as Spoth and Redmond (1995), Heinrichs and colleagues (2005), and Dumas and colleagues (2007).

Finally, the barriers and facilitators to completing home practice was not explored in the qualitative interviews. The reason for this is that when the interviews where conducted, the main objective was to determine barriers and facilitators to enrolment and attendance – it was only through later conceptualisation that home practice was introduced into the study's definition of engagement. Future studies should explore the factors that affect home practice completion, so that it can inform facilitator training.

Conclusion

Despite its limitations, this study provides a valuable contribution to the literature on parental engagement in parent training within the context of poverty. It clearly demonstrates that contextual factors play a central role in participants' engagement behaviour, and that poverty affects engagement. Many parents in the targeted communities are living under extremely difficult circumstances and may be focused on addressing more immediate needs, such as feeding their families, rather than joining parent training, especially if they are not able to determine how the programme will benefit them. Encouragingly, though, once parents are retained in the programme they do make gains in their parenting. It is imperative, therefore, that ways to reduce barriers for poor parents to engage in parenting programmes are found, as they may otherwise be trapping their children in a cycle of poverty through the long-term effects of unaddressed conduct problems. Children who are parented positively show better child development outcomes and so have a greater chance of developing into well-adjusted and economically productive adults (Gould & Ward, 2015).

As evaluation studies on parenting programmes are becoming more common within low- and middle-income countries, it is essential that they capture data on engagement so that a solid understanding of this process can be achieved. This understanding must then be shared with those involved in plans to scale-up parenting services so that as many parents as possible can benefit from intervention and so that cost-benefit ratios are improved.

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RCT Baseline (English)

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Section 1. Household and Demographic Information

1.1 **Interview code**

Enter interview code.

Expects a numeric response (**required**)

1.2 **Interview code 2**

Enter Interview code again to verify.

Expects a numeric response (**required**)

Constraints

*Response must be **Equals 'Interview code (1.1)'***

1.3 **Greeting 1**

Thank you for welcoming us into your home. We greatly appreciate your time. The questions that I will be asking you today are about you and your child that you chose during our initial meeting.

1.4 **Greeting 2**

Remember this is not a test. There are no right or wrong answers. Everything that you say will be kept confidential.

1.5 **Greeting 3**

Everything that we are doing is aimed at helping parents and their children in South Africa. Please be honest and as accurate as you can with your answers.

1.6 **Respondent first name**

What is your first name?

Expects a single line text response (**required**)

1.7 **Respondent surname**

What is your surname?

Expects a single line text response (**required**)

1.8 **Age**

How old are you (in years)?

Expects a numeric response (**required**)

1.9 **Date of birth**

What is your date of birth?

Expects a date response (**required**)

1.10 **Gender**

What is your gender?

Expects a single option response (**required**)

- [ ] Female [0]
- [ ] Male [1]

Section 2. Caregiver Health

2.1 **Challenges you face as a caregiver**

We all experience some problems with our health. Sometimes we feel well and sometimes we don't. The next questions will ask you about your heath and any challenges that you may have. Remember, all of your answers are confidential.

2.2 **General health**

In general, over the past month would you say your health has been:

Expects a single option response (**required**)

- [ ] Excellent [1]
- [ ] Very good [2]
- [ ] Good [3]
- [ ] Fair [4]
- [ ] Poor [5]
- [ ] Refused [999]

2.3 **Moderate activities**

Does your health make it difficult for you to do activities such as moving a table, or pushing around boxes in your home?

Expects a single option response (**required**)

- [ ] Yes, limited a lot [1]
- [ ] Yes, limited a little [2]
- [ ] No, not limited at all [3]
- [ ] Refused [999]

2.4 **Carrying shopping**

Does your health make it difficult for you to do things such as shopping, walking distances, or carrying a child?

Expects a single option response (**required**)

- [ ] Yes, limited a lot [1]
- [ ] Yes, limited a little [2]
- [ ] No, not limited at all [3]
- [ ] Refused [999]

2.5 **Physical illness**

We all get sick sometimes. We would like to ask about any illness you might have. These questions may be personal but this information will help us to support parents and their children.

2.6 **Physical illness1**

Remember, all of your answers are strictly confidential. If you become uncomfortable, you can skip the question and move on to the next one.

2.7 **Do you have any of these illnesses**

Do you have any of these illnesses? [Please check all that apply]

Expects multiple selected options (**required**)

- [ ] BP or high blood pressure [1]
- [ ] Epilepsy [2]
- [ ] Any of the following symptoms: paleness, changing hair colour, burning sensations of feet, dry scaly skin [3]
- [ ] Jaundice, where the whites of your eyes are yellow and no history of alcohol abuse [4]
- [ ] Asthma [5]
- [ ] Shingles or a rash on your skin like a belt [6]
- [ ] A cold or flu [7]
- [ ] Abscesses or sores [8]
- [ ] Any two of the following: ulcers in the mouth, difficulty swallowing, or white patches inside the mouth [9]
- [ ] Heart disease [10]
- [ ] Cancer [11]
- [ ] Diabetes [12]
- [ ] Trouble breathing or a cough for more than 2 weeks with fever [13]
- [ ] Arthritis [14]
- [ ] None of the above [0]
- [ ] Refused [999]

2.8 **Additional conditions**

Have you had: [Check all that apply]

Expects multiple selected options (**required**)

- [ ] General body pain (headaches, backaches etc) [1]
- [ ] Weight loss and become very thin [2]
- [ ] A stroke [3]
- [ ] Pneumonia or bronchitis (really sick with cough, chest pain and yellow spit for at least 1 week) [4]
- [ ] TB within the last 5 years [5]
- [ ] Any injury or burn [6]
- [ ] Acute diarrhoea or loose stools for more than 2 days [7]
- [ ] Have you been bewitched [8]
- [ ] None of the above [888]
- [ ] Refused [999]

2.9 **Any other health problems**

Do you have any other health problems we havent asked about?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Don't know [666]
- [ ] Refused [999]

Prerequisites
Skip when ***Any other health problems (2.9)*** **Not Equal 'Yes [1]'**

2.10 **Specify other health problem**

Please specify what other health problem you have?

Expects a single line text response (**required**)

Section 3. Child Health

3.1 **Child in study notes**

Now we would like to ask you some questions about your child who you identified to be part of the study during the screening visit at your home.

3.2 **Instruction**

This child should be the same person that you answered questions about last time.

3.3 **Childs first name**

Please remind us of your child's first name.

Expects a single line text response (**required**)

3.4 **Childs surname**

What is **Childs first name (3.3)** 's surname?

Expects a single line text response (**required**)

3.5 **Child gender**

What gender is **Childs first name (3.3)** ?

Expects a single option response (**required**)

- [ ] Female [0]
- [ ] Male [1]

3.6 **Child age**

How old is **Childs first name (3.3)** ? [Please enter in years]

Expects a numeric response (**required**)

Constraints

*Response must be **Less Than '10'***

*Response must be **Greater Than '1'***

3.7 **Relationship to the child again**

What is your relationship this to **Childs first name (3.3)** ?

Expects a single option response (**required**)

- [ ] Biological mother [0]
- [ ] Biological father [1]
- [ ] Stepfather/ stepmother [2]
- [ ] Brother/ sister/ stepbrother/ stepsister [3]
- [ ] Grandmother/ grandfather [4]
- [ ] Great-grandmother/ grandfather [5]
- [ ] Aunt/ uncle [6]
- [ ] Cousin [7]
- [ ] Foster parent [8]
- [ ] Other [111]
- [ ] Refused [999]

Prerequisites
Skip when ***Relationship to the child again (3.7)*** **Not Equal 'Other [111]'**

3.8 **Relationship to the child - Other**

Please specify:

Expects a single line text response (**required**)

3.9 **Child health**

Some children face few health difficulties, while others may struggle with their health. The next questions will focus on **Childs first name (3.3)** 's health.

3.10 **Difficulty seeing**

Does **Childs first name (3.3)** have difficulty seeing, even if wearing glasses?

Expects a single option response (**required**)

- [ ] No, no difficulty [1]
- [ ] Yes, some difficulty [2]
- [ ] Yes a lot of difficulty [3]
- [ ] Cannot do at all [4]
- [ ] Don't Know [666]
- [ ] Refused [999]

3.11 **Difficulty hearing**

Does **Childs first name (3.3)** have difficulty hearing, even if using a hearing aid?

Expects a single option response (**required**)

- [ ] No, no difficulty [1]
- [ ] Yes, some difficulty [2]
- [ ] Yes a lot of difficulty [3]
- [ ] Cannot do at all [4]
- [ ] Don't know [666]
- [ ] Refused [999]

3.12 **Difficulty walking or climbing steps**

Does **Childs first name (3.3)** have difficulty walking or climbing steps in a way that isn't normal for his/her age?

Expects a single option response (**required**)

- [ ] No, no difficulty [1]
- [ ] Yes, some difficulty [2]
- [ ] Yes a lot of difficulty [3]
- [ ] Cannot do at all [4]
- [ ] Don't know [666]
- [ ] Refused [999]

3.13 **Difficulty remembering or concentrating**

Does **Childs first name (3.3)** have difficulty remembering or concentrating in a way that isn't normal for his/her age?

Expects a single option response (**required**)

- [ ] No, no difficulty [1]
- [ ] Yes, some difficulty [2]
- [ ] Yes a lot of difficulty [3]
- [ ] Cannot do at all [4]
- [ ] Don't know [666]
- [ ] Refused [999]

3.14 **Difficulty with self care**

Does **Childs first name (3.3)** have difficulty with self-care, such as washing himself/herself all over or dressing, in a way that isn't normal for his/her age?

Expects a single option response (**required**)

- [ ] No, no difficulty [1]
- [ ] Yes, some difficulty [2]
- [ ] Yes a lot of difficulty [3]
- [ ] Cannot do at all [4]
- [ ] Don't know [666]
- [ ] Refused [999]

3.15 **Difficulty communicating or being understood**

Does **Childs first name (3.3)** have difficulty communicating or being understood when using his/her usual language, in a way that isn't normal for his/her age?

Expects a single option response (**required**)

- [ ] No, no difficulty [1]
- [ ] Yes, some difficulty [2]
- [ ] Yes a lot of difficulty [3]
- [ ] Cannot do at all [4]
- [ ] Don't know [666]
- [ ] Refused [999]

3.16 **Is child disabled**

Is **Childs first name (3.3)** disabled?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Don't know [666]
- Refused [999]

Prerequisites
Skip when ***Is child disabled (3.16)*** **Not Equal 'Yes [1]'**

3.17 **Kind of disability**

What kind of disability does **Childs first name (3.3)** have?

Expects a single line text response (**required**)

3.18 **Thank you and new section**

Thank you for answering these questions. We are now going to move on to a new section.

Section Prerequisites
Skip when ***Relationship to the child again (3.7)*** **Equals 'Biological father [1]'**

Section 4. Child's Father

4.1 **Is father part of this household**

Is **Childs first name (3.3)** 's biological father part of this household?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

Prerequisites
Skip when ***Is father part of this household (4.1)*** **Equals 'Yes [1]'**

4.2 **Fathers location**

Can you tell us where he is?

Expects a single option response (**required**)

- [ ] Works away from home to provide financial support to household [0]
- [ ] Uninvolved in household life [1]
- [ ] Lives elsewhere, but is involved in household [2]
- [ ] Death [3]
- [ ] Other [111]
- [ ] Don't know [666]
- [ ] Refused [999]

Prerequisites
Skip when ***Fathers location (4.2)*** **Not Equal 'Other [111]'**

4.3 **Fathers location Other**

Please specify:

Expects a single line text response (**required**)

Prerequisites
Skip when ***Fathers location (4.2)*** **Not Equal 'Death [3]'**

4.4 **Cause of fathers death**

Was the father's death due to:

Expects a single option response (**required**)

- [ ] Illness or other health problem [0]
- [ ] Attacked or killed by a person [1]
- [ ] Traffic accident [2]
- [ ] Other [111]
- [ ] Don't know [666]
- [ ] Refused [999]

Prerequisites
Skip when ***Cause of fathers death (4.4)*** **Not Equal 'Other [111]'**

4.5 **Cause of fathers death Other**

Please specify:

Expects a single line text response (**required**)

Prerequisites
Skip when ***Fathers location (4.2)*** **Not Equal 'Death [3]'**
Skip when ***Cause of fathers death (4.4)*** **Not Equal 'Illness or other health problem [0]'**

4.6 **Health related reason due to**

Was the health-related reason due to:

Expects a single option response (**required**)

- [ ] Heart disease [0]
- [ ] Stroke [1]
- [ ] Hypertension [2]
- [ ] Diarrhoeal disease [3]
- [ ] Diabetes [4]
- [ ] Lung disease [5]
- [ ] Asthma [6]
- [ ] HIV/AIDS [7]
- [ ] Other illness [8]
- [ ] Don't know [666]
- [ ] Refused [999]

Prerequisites
Skip when ***Health related reason due to (4.6)*** **Not Equal 'Other illness [8]'**

4.7 **Health-related reason due to Other Illness Father**

Write out the Other Illness

Expects a single line text response (**required**)

Prerequisites
Skip when ***Fathers location (4.2)*** **Not Equal 'Death [3]'**

4.8 **Details of death**

Did he: [Check all that apply]

Expects multiple selected options (**required**)

- [ ] Lose weight and become very thin [0]
- [ ] Have diabetes [1]
- [ ] Have any of the following symptoms: paleness, changing hair colour, burning sensations of feet, dry scaly skin [2]
- [ ] Have emotional problems [3]
- [ ] Have epilepsy [4]
- [ ] Were his eyes yellow and did he have a fever [5]
- [ ] Have shingles or a rash on his skin like a belt [6]
- [ ] Have high blood pressure [7]
- [ ] Have abscesses or sores [8]
- [ ] Have two of the following: ulcers in the mouth, difficulty swallowing, white patches inside the mouth [9]
- [ ] Drink alcohol too much [10]
- [ ] Have cancer [11]
- [ ] Have trouble breathing, a cough lasting more than 2 weeks with fever [12]
- [ ] Have TB within the last 5 years [13]
- [ ] Have arthritis [14]
- [ ] Have acute diarrhoea or loose stools for more than 2 days [15]
- [ ] Have HIV [16]
- [ ] Was he bewitched [17]
- [ ] None of the above [888]
- [ ] Refused [999]

Prerequisites
Skip when ***Details of death (4.8)*** **Excludes 'Have cancer [11]'**
Skip when ***Fathers location (4.2)*** **Not Equal 'Death [3]'**

4.9 **Details of death - father - cancer**

Where was the cancer?

Expects a single line text response (**required**)

Section Prerequisites
Skip when ***Relationship to the child again (3.7)*** **Equals 'Biological mother [0]'**

Section 5. Child's Mother

5.1 **Is mother part of this household**

Is **Childs first name (3.3)** 's biological mother part of this household?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Refused [999]

Prerequisites
Skip when ***Is mother part of this household (5.1)*** **Equals 'Yes [1]'**

5.2 **Mothers location**

Can you tell us where she is?

Expects a single option response (**required**)

- [ ] Works away from home to provide financial support to household [0]
- [ ] Uninvolved in household life [1]
- [ ] Lives elsewhere, but is involved in household [2]
- [ ] Death [3]
- [ ] Other [111]
- [ ] Don't know [666]
- [ ] Refused [999]

Prerequisites
Skip when ***Mothers location (5.2)*** **Not Equal 'Other [111]'**

5.3 **Mothers location Other**

Please specify:

Expects a single line text response (**required**)

Prerequisites
Skip when ***Mothers location (5.2)*** **Not Equal 'Death [3]'**

5.4 **Cause of mothers death**

Was the mother's death due to:

Expects a single option response (**required**)

- [ ] Illness or other health problem [0]
- [ ] Attacked or killed by a person [1]
- [ ] Traffic accident [2]
- [ ] Other [111]
- [ ] Don't know [666]
- [ ] Refused [999]

Prerequisites
Skip when ***Cause of mothers death (5.4)*** **Not Equal 'Other [111]'**

5.5 **Cause of mothers death Other**

Please specify:

Expects a single line text response (**required**)

Prerequisites
Skip when ***Mothers location (5.2)*** **Not Equal 'Death [3]'**
Skip when ***Cause of mothers death (5.4)*** **Not Equal 'Illness or other health problem [0]'**

5.6 **Health related reason due to - mother**

Was the health-related reason due to:

Expects a single option response (**required**)

- [ ] Heart disease [0]
- [ ] Stroke [1]
- [ ] Hypertension [2]
- [ ] Diarrhoeal disease [3]
- [ ] Diabetes [4]
- [ ] Pulmonary disease [5]
- [ ] Asthma [6]
- [ ] HIV/AIDS [7]
- [ ] Other illness [8]
- [ ] Don't know [666]
- [ ] Translate to English: Landula [999]

Prerequisites
Skip when ***Health related reason due to - mother (5.6)*** **Not Equal 'Other illness [8]'**

5.7 **Health-related reason due to Other Illness Mother**

Write out the Other Illness

Expects a single line text response (**required**)

Prerequisites
Skip when ***Mothers location (5.2)*** **Not Equal 'Death [3]'**

5.8 **Details of death - mother**

Did she: [Check all that apply]

Expects multiple selected options (**required**)

- [ ] Lose weight and become very thin [0]
- [ ] Have diabetes [1]
- [ ] Have any of the following symptoms: paleness, changing hair colour, burning sensations of feet, dry scaly skin [2]
- [ ] Have emotional problems [3]
- [ ] Have epilepsy [4]
- [ ] Were her eyes yellow and did she have a fever [5]
- [ ] Have shingles or a rash on her skin like a belt [6]
- [ ] Have high blood pressure [7]
- [ ] Have abscesses or sores [8]
- [ ] Have two of the following: ulcers in the mouth, difficulty swallowing, white patches inside the mouth [9]
- [ ] Drink alcohol too much [10]
- [ ] Have cancer [11]
- [ ] Have trouble breathing, a cough lasting more than 2 weeks with fever [12]
- [ ] Have TB within the last 5 years [13]
- [ ] Have arthritis [14]
- [ ] Have acute diarrhoea or loose stools for more than 2 days [15]
- [ ] Have HIV [16]
- [ ] Was she bewitched [17]
- [ ] None of the above [888]
- [ ] Refused [999]

Prerequisites
Skip when ***Details of death - mother (5.8)*** **Excludes 'Have cancer [11]'**
Skip when ***Mothers location (5.2)*** **Not Equal 'Death [3]'**

5.9 **Details of death - mother - cancer**

Where was the cancer?

Expects a single line text response (**required**)

5.10 **Thank you and new section2**

Thank you for answering these questions. We are not going to move on to a new section

---

Section 6. Private HIV Section

6.1 **Intro to private HIV section**

Many families in our communities are affected by HIV and AIDS. We understand that this can be difficult to talk about. That is perfectly normal.

6.2 **Intro to private HIV section 1**

We're now going to ask some questions about the HIV status of members of your household. Everything you tell me is absolutely confidential, and no-one else will find out about it.

6.3 **Intro to private HIV section 2**

Would you prefer to answer these questions like everything else, where I ask you the questions and you answer them so that I can't see what you're putting into the phone? Or would you prefer to answer them on this paper, and then seal your answers into this envelope? The paper and envelope do not have your name on them. Everything you tell me is absolutely confidential, and no-one else will find out about it.

6.4 **Phone or paper for HIV section**

Some people feel more comfortable with the phone, and some people feel more comfortable with the envelope. I can't see what you write on either the phone or the paper and envelope. What would you prefer?

Expects a single option response (**required**)

- [ ] I feel comfortable answering on the phone [1]
- [ ] I feel comfortable answering on a piece of paper [2]

6.5 **Ever been tested for HIV**

Have you ever been tested for HIV?

Expects a single option response (optional)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Refused [999]

6.6 **When were you tested for HIV**

When were you last tested for HIV (year)?

Expects a single line text response (optional)

6.7 **Was the result positive for HIV**

Was the result positive for HIV?

Expects a single option response (optional)

- Yes [1]
- No [0]
- Don't know [666]
- Refused [999]

6.8 **Anti-retrovirals or ARVs**

Do you use anti-retrovirals or ARVs?

Expects a single option response (optional)

- Yes [1]
- No [0]
- Don't know [666]
- Refused [999]

6.9 **CD4 count**

Has your doctor told you your CD4 count?

Expects a single option response (optional)

- Yes [1]
- No [0]
- Don't know [666]
- Refused [999]

Prerequisites
Skip when ***CD4 count (6.9)*** **Equals 'No [0]'**
Skip when ***CD4 count (6.9)*** **Equals 'Don't know [666]'**
Skip when ***CD4 count (6.9)*** **Equals 'Refused [999]'**

6.10 **Last CD4 count**

When did your doctor last tell you your CD4 count?

Expects a date response (optional)

Prerequisites
Skip when ***CD4 count (6.9)*** **Equals 'No [0]'**
Skip when ***CD4 count (6.9)*** **Equals 'Don't know [666]'**
Skip when ***CD4 count (6.9)*** **Equals 'Refused [999]'**

6.11 **CD4 count number**

What was it?

Expects a numeric response (optional)

Constraints

Response must be ***Greater Than or Equal '0'***

6.12 **Hospitalised due to AIDS**

In the last month, have you been so sick that you needed to go to the hospital?

Expects a single option response (optional)

- Yes [1]
- No [0]
- Refused [999]

Prerequisites
Skip when ***Hospitalised due to AIDS (6.12)*** **Not Equal 'Yes [1]'**

6.13 **Reason for hospitalisation - Carer**

What was the reason for hospitalisation?

Expects a single line text response (**required**)

6.14 **Child HIV**

Thank you very much for your patience and honesty. Next we are going to ask you about your child. These answers can also be given on the phone or on a piece of paper.

6.15 **Child Ever Tested for HIV**

Has **Childs first name (3.3)** ever been tested for HIV?

Expects a single option response (optional)

- Yes [1]
- No [0]
- Don't know [666]
- Refused [999]

6.16 **Was the result positive**

Was the result positive for HIV?

Expects a single option response (optional)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Don't know [666]
- [ ] Refused [999]

6.17 **ARVs**

Does **Childs first name (3.3)** use anti-retrovirals or ARVs?

Expects a single option response (optional)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Don't know [666]
- [ ] Refused [999]

6.18 **Has doctor told you the CD4 count**

Has your doctor told you **Childs first name (3.3)** 's CD4 count?

Expects a single option response (optional)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Don't know [666]
- [ ] Refused [999]

Branches

If response **Not Equal 'Yes [1]'** then skip to ***Child hospitalised due to AIDS (6.21)***

6.19 **Date of CD4 count disclosure**

When did your doctor last tell you **Childs first name (3.3)** 's CD4 count?

Expects a date response (optional)

6.20 **CD4 count value**

What was it?

Expects a numeric response (optional)

Constraints

*Response must be **Greater Than or Equal '0'***

6.21 **Child hospitalised due to AIDS**

In the past month, has **Childs first name (3.3)** been so sick that he/she needed to go to the hospital?

Expects a single option response (optional)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Refused [999]

Prerequisites
Skip when ***Child hospitalised due to AIDS (6.21)*** **Not Equal 'Yes [1]'**

6.22 **Reason for hospitalisation - Child**

What was the reason for hospitalisation?

Expects a single line text response (**required**)

6.23 **Other household member HIV positive**

Is there anyone else in your household who is positive for HIV?

Expects a single option response (optional)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Don't know [666]
- [ ] Refused [999]

6.24 **Number of people in house HIV positive**

How many other people are HIV positive in this household?

Expects a numeric response (optional)

6.25 **HH member use ARVs**

Does anyone else in your household use anti-retrovirals or ARVs?

Expects a single option response (optional)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Don't know [666]
- [ ] Refused [999]

6.26 **HH member hospitalised due to AIDS**

In the last month, has anyone else in your household been so sick that he/she needed to go to the hospital?

Expects a single option response (optional)

- Yes [1]
- No [0]
- Refused [999]

Prerequisites
Skip when ***HH member hospitalised due to AIDS (6.26)*** **Not Equal 'Yes [1]'**

6.27 **Reason for hospitalisation - HH member**

What was the reason for hospitalisation?

Expects a single line text response (**required**)

6.28 **Thank you for honesty and patience**

Thank you very much for being so patient and answering these difficult questions honestly. Your assistance today will be very helpful in providing support to parents and children in South Africa. We are now moving on to a new section about the relationship between you and your child.

6.29 **Paper or phone**

Please indicate whether you answered these questions on the phone or paper.

Expects a single option response (**required**)

- Phone [1]
- Paper [2]

Section 7. Positive Parenting

7.1 **Relationship to child 1**

As parents, sometimes we get on very well with our children, and other times it can feel difficult to have a good relationship. The next questions will ask about your relationship with **Childs first name (3.3)** . Please answer all the questions as best you can, even if you are not absolutely sure.

7.2 **Relationship to child 2**

Please give your answers on the basis of your relationship with **Childs first name (3.3)** IN THE PAST MONTH (30 DAYS).

7.3 **Playing**

How often do you play with your child?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Very rarely [1]
- [ ] Rarely [2]
- [ ] Sometimes [3]
- [ ] Often [4]
- [ ] Very often [5]
- [ ] Always [6]
- [ ] Refused [999]

7.4 **Playing behaviour**

Is playing with your child currently a problem or difficult for you?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Refused [(999)]

7.5 **Problem solving**

How often do you stand back and let your child work through problems (s)he might be able to solve on his/her own?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Very rarely [1]
- [ ] Rarely [2]
- [ ] Sometimes [3]
- [ ] Often [4]
- [ ] Very often [5]
- [ ] Always [6]
- [ ] refused [999]

7.6 **Problem solving behaviour**

Is letting your child work through problems (s)he might be able to solve on his/her own currently a problem or difficult for you?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Refused [999]

7.7 **Share an enjoyable activity**

How often do you invite your child to play a game with you or share an enjoyable activity?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Very rarely [1]
- [ ] Rarely [2]
- [ ] Sometimes [3]
- [ ] Often [4]
- [ ] Very often [5]
- [ ] Always [6]
- [ ] Refuse [999]

7.8 **Share an enjoyable activity behaviour**

Is inviting your child to play a game with you or share an enjoyable activity currently a problem or difficult for you?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Refuse [999]

7.9 **Praise child**

How often do you notice and praise your child's good behaviour?

Expects a single option response (**required**)

- Never [0]
- Very rarely [1]
- Rarely [2]
- Sometimes [3]
- Often [4]
- Very often [5]
- Always [6]
- Refuse [999]

7.10 **Praise child behaviour**

Is praising your child currently a problem or difficult for you?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refuse [999]

7.11 **Teach your child new skills**

How often do you teach your child new skills?

Expects a single option response (**required**)

- Never [0]
- Very rarely [1]
- Rarely [2]
- Sometimes [3]
- Often [4]
- Very often [5]
- Always [6]
- Refused [999]

7.12 **Teach your child new skills difficulty**

Is teaching your child new skills currently a problem or difficult for you?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

7.13 **Involve your child in household chores**

How often do you involve your child in household chores?

Expects a single option response (**required**)

- Never [0]
- Very rarely [1]
- Rarely [2]
- Sometimes [3]
- Often [4]
- Very often [5]
- Always [6]
- Refused [999]

7.14 **Involve child in chores behaviour**

Is involving your child in household chores currently a problem or difficult for you?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

7.15 **Rewarding**

How often did you reward your child when he/she did something well or showed a new skill?

Expects a single option response (**required**)

- Never [0]
- Very rarely [1]
- Rarely [2]
- Sometimes [3]
- Often [4]
- Very often [5]
- Always [6]
- Refused [999]

7.16 **Reward behaviour**

Is rewarding your child when he/she did something well or showed a new skill currently a problem or difficult for you?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

7.17 **Stick to rules**

How often do you stick to your rules and not change your mind?

Expects a single option response (**required**)

- Never [0]
- Very rarely [1]
- Rarely [2]
- Sometimes [3]
- Often [4]
- Very often [5]
- Always [6]
- Refused [999]

7.18 **Stick to rules behaviour**

Is sticking to your rules and not changing your mind currently a problem or difficult for you?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

7.19 **Speak calmly with child**

How often did you speak calmly with your child when you were upset with him or her?

Expects a single option response (**required**)

- Never [0]
- Very rarely [1]
- Rarely [2]
- Sometimes [3]
- Often [4]
- Very often [5]
- Always [6]
- Refused [999]

7.20 **Speak clamly behaviour**

Is speaking calmly with your child when you are upset with him or her currently a problem or difficult for you?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Refused [999]

7.21 **Explain clearly**

How often did you explain what you wanted your child to do in clear and simple ways?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Very rarely [1]
- [ ] Rarely [2]
- [ ] Sometimes [3]
- [ ] Often [4]
- [ ] Very often [5]
- [ ] Always [6]
- [ ] Refused [999]

7.22 **Explain clearly behaviour**

Is explaining what you want your child to do in clear and simple ways currently a problem or difficult for you?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Refused [999]

7.23 **What you wanted him or her to do**

How often do you tell your child what you wanted him or her to do rather than tell him/her to stop doing something?

Expects a single option response (**required**)

- Never [0]
- Very rarely [1]
- Rarely [2]
- Sometimes [3]
- Often [4]
- Very often [5]
- Always [6]
- Refused [999]

7.24 **What you wanted them to do behaviour**

Is telling your child what you want him or her to do rather than telling him/her to stop doing something currently a problem or difficult for you?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

7.25 **Expected behaviour**

How often did you tell your child how you expected him or her to behave?

Expects a single option response (**required**)

- Never [0]
- Very rarely [1]
- Rarely [2]
- Sometimes [3]
- Often [4]
- Very often [5]
- Always [6]
- Refused [999]

7.26 **Expected behaviour from child**

Is telling your child how you expect him or her to behave currently a problem or difficult for you?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Refused [999]

7.27 **Enforce rules**

How often did you set rules on your child's behaviour that you were able to enforce?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Very rarely [1]
- [ ] Rarely [2]
- [ ] Sometimes [3]
- [ ] Often [4]
- [ ] Very often [5]
- [ ] Always [6]
- [ ] Refused [999]

7.28 **Enforce rules behaviour**

Is your ability to enforce rules on your child's behaviour currently a problem or difficult for you?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Refused [999]

7.29 **Ensure rules are followed**

How often did you make sure your child followed the rules you set all or most of the time?

Expects a single option response (**required**)

- Never [0]
- Very rarely [1]
- Rarely [2]
- Sometimes [3]
- Often [4]
- Very often [5]
- Always [6]
- Refused [999]

7.30 **Ensure rules are followed behaviour**

Is making sure your child follows the rules you set all or most of the time currently a problem or difficult for you?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

7.31 **Family Meal Together**

How often did you have a family meal together at home?

Expects a single option response (**required**)

- Never [0]
- Very rarely [1]
- Rarely [2]
- Sometimes [3]
- Often [4]
- Very often [5]
- Always [6]
- Refused [999]

7.32 **Family Meal Together Problem**

Is having a family meal together at home currently a problem for you?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

7.33 **Thank you parenting**

Thank you so much for answering these questions. You are doing a great job with this questionnaire.

Section 8. Monitoring & Supervision

8.1 **Monitoring and Supervision Introduction**

As parents, it can be difficult to supervise our children, and know where they are or what they are doing all the time.

8.2 **Monitoring and Supervision Introduction 2**

We will now go through various statements about you and **Childs first name (3.3)** . Please tell me how often each has happened IN THE PAST MONTH (LAST 30 DAYS).

8.3 **Lets you know where going**

Childs first name (3.3) lets you know where he/she is going when leaving the home.

Expects a single option response (**required**)

- Never [1]
- Almost never [2]
- Sometimes [3]
- Often [4]
- Always [5]
- Refused [999]

8.4 **Stay out in evening**

Childs first name (3.3) stays out in the evening past the time he/she is supposed to be home.

Expects a single option response (**required**)

- [ ] Never [1]
- [ ] Almost never [2]
- [ ] Sometimes [3]
- [ ] Often [4]
- [ ] Always [5]
- [ ] Refused [999]

8.5 **Friends you dont know**

Childs first name (3.3) is out with friends you don't know.

Expects a single option response (**required**)

- [ ] Never [1]
- [ ] Almost never [2]
- [ ] Sometimes [3]
- [ ] Often [4]
- [ ] Always [5]
- [ ] Refused [999]

8.6 **No set time to be home**

Childs first name (3.3) goes out without a set time to be home.

Expects a single option response (**required**)

- [ ] Never [1]
- [ ] Almost never [2]
- [ ] Sometimes [3]
- [ ] Often [4]
- [ ] Always [5]
- [ ] Refused [999]

8.7 **Out after dark without adult**

Childs first name (3.3) is out after dark without an adult with him/her.

Expects a single option response (**required**)

- [ ] Never [1]
- [ ] Almost never [2]
- [ ] Sometimes [3]
- [ ] Often [4]
- [ ] Always [5]
- [ ] Refused [999]

8.8 **Forgot what child doing**

You get so busy that you forgot where **Childs first name (3.3)** is and what he/she is doing.

Expects a single option response (**required**)

- [ ] Never [1]
- [ ] Almost never [2]
- [ ] Sometimes [3]
- [ ] Often [4]
- [ ] Always [5]
- [ ] Refused [999]

8.9 **Check home time**

You check that **Childs first name (3.3)** comes home at the time she/he was supposed to.

Expects a single option response (**required**)

- [ ] Never [1]
- [ ] Almost never [2]
- [ ] Sometimes [3]
- [ ] Often [4]
- [ ] Always [5]
- [ ] Refused [999]

8.10 **Tell child where going**

You tell **Childs first name (3.3)** where you are going when you leave the house.

Expects a single option response (**required**)

- Never [1]
- Almost never [2]
- Sometimes [3]
- Often [4]
- Always [5]
- Refused [999]

8.11 **Home without adult**

Childs first name (3.3) is home without adult supervision.

Expects a single option response (**required**)

- Never [1]
- Almost never [2]
- Sometimes [3]
- Often [4]
- Always [5]
- Refused [999]

8.12 **Thanks supervision**

Thank you again for being so patient and honest with your answers! We are now moving on to a new section about how you discipline your child.

Section 9. Disciplining Our Children

9.1 **ICAST Introduction**

Its really tough to be a parent in todays world. People who look after kids often struggle with the discipline of their children and in keeping them safe.

9.2 **ICAST Introduction 3**

All adults use certain methods to teach children the right behaviour or to stop them from behaving badly. Sometimes they make us really angry or upset and we do things we wish we hadnt.

9.3 **ICAST Introduction 4**

Please tell me how many times you have tried these ways of disciplining **Childs first name (3.3)** in the last month (30 days)? If you have not done them in the last month but have done them before, please tell us.

9.4 **ICAST1**

How often did you explain why something was wrong to **Childs first name (3.3)** in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.5 **ICAST2**

How often did you tell **Childs first name (3.3)** to start or stop doing something in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.6 **ICAST3**

How often did you shake **Childs first name (3.3)** in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.7 **ICAST4**

How often did you hit **Childs first name (3.3)** with an object such as a stick, broom, switch, or belt in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.8 **ICAST5**

How often did you give **Childs first name (3.3)** something else to do (distracted him/her) in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.9 **ICAST6**

How often did you twist **Childs first name (3.3)** 's ear in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.10 **ICAST7**

How often did you hit **Childs first name (3.3)** on the face or head with your hand in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.11 **ICAST8**

How often did you pull **Childs first name (3.3)** 's hair in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.12 **ICAST9**

How often did you threaten to abandon **Childs first name (3.3)** in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.13 **ICAST Introduction 5**

Thank you very much for being honest with us. Many people struggle to manage their children's behaviour. We hope your answers will be able to help you and others.

9.14 **ICAST10**

How often did you shout, yell or scream at **Childs first name (3.3)** in the past month?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Has happened but not in the past month [1]
- [ ] Once or twice [2]
- [ ] 3-5 times [3]
- [ ] 6-10 times [4]
- [ ] More than 10 times [5]
- [ ] Refused [999]

9.15 **ICAST11**

How often did you tell **Childs first name (3.3)** that you wished **Childs first name (3.3)** were dead or had never been born in the past month?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Has happened but not in the past month [1]
- [ ] Once or twice [2]
- [ ] 3-5 times [3]
- [ ] 6-10 times [4]
- [ ] More than 10 times [5]
- [ ] Refused [999]

9.16 **ICAST12**

How often did you threaten to kill **Childs first name (3.3)** or to invoke ghosts or evil spirits, or harmful people in the past month?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Has happened but not in the past month [1]
- [ ] Once or twice [2]
- [ ] 3-5 times [3]
- [ ] 6-10 times [4]
- [ ] More than 10 times [5]
- [ ] Refused [999]

9.17 **ICAST13**

How often did you push, grab, or kick **Childs first name (3.3)** with a foot in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.18 **ICAST14**

How often did you curse, or insult **Childs first name (3.3)** by calling him/her dumb, lazy or other names in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.19 **ICAST15**

How often did you hit, beat, slap or spank **Childs first name (3.3)** with your bare hand in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.20 **ICAST16**

How often did you choke **Childs first name (3.3)** or squeeze **Childs first name (3.3)** neck with hands or something else, smother him or her with a pillow or tried to drown him/her in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.21 **ICAST17**

How often did you threaten to kick **Childs first name (3.3)** out of the house or send **Childs first name (3.3)** away from home in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.22 **ICAST18**

How often did you lock **Childs first name (3.3)** out of the house in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.23 **ICAST19**

How often did you take away **Childs first name (3.3)** 's privileges or money, forbade something he/she liked or told **Childs first name (3.3)** he/she cant leave the home in the past month?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Has happened but not in the past month [1]
- [ ] Once or twice [2]
- [ ] 3-5 times [3]
- [ ] 6-10 times [4]
- [ ] More than 10 times [5]
- [ ] Refused [999]

9.24 **ICAST Introduction 6**

Thank you so much for telling us this. We know its not easy to be a parent and everyone struggles sometimes.

9.25 **ICAST20**

How often did you refuse to speak to **Childs first name (3.3)** in the past month?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Has happened but not in the past month [1]
- [ ] Once or twice [2]
- [ ] 3-5 times [3]
- [ ] 6-10 times [4]
- [ ] More than 10 times [5]
- [ ] Refused [999]

9.26 **ICAST21**

How often did you withhold a meal from **Childs first name (3.3)** as punishment in the past month?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Has happened but not in the past month [1]
- [ ] Once or twice [2]
- [ ] 3-5 times [3]
- [ ] 6-10 times [4]
- [ ] More than 10 times [5]
- [ ] Refused [999]

9.27 **ICAST22**

How often did you use public humiliation to discipline **Childs first name (3.3)** in the past month?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Has happened but not in the past month [1]
- [ ] Once or twice [2]
- [ ] 3-5 times [3]
- [ ] 6-10 times [4]
- [ ] More than 10 times [5]
- [ ] Refused [999]

9.28 **ICAST Introduction 7**

Sometimes children can make us so angry that we do things that are just not like ourselves. These are some things that caregivers have done could you tell us whether any of these have ever been true for you at really difficult time.

9.29 **ICAST23**

How often did you burn or scald **Childs first name (3.3)** , or tie him/her up to something in the past month?

Expects a single option response (**required**)

- [ ] Never [0]
- [ ] Has happened but not in the past month [1]
- [ ] Once or twice [2]
- [ ] 3-5 times [3]
- [ ] 6-10 times [4]
- [ ] More than 10 times [5]
- [ ] Refused [999]

9.30 **ICAST24**

How often did you hit **Childs first name (3.3)** over and over again with object or fist in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.31 **ICAST25**

How often did you threaten **Childs first name (3.3)** with a knife or gun in the past month?

Expects a single option response (**required**)

- Never [0]
- Has happened but not in the past month [1]
- Once or twice [2]
- 3-5 times [3]
- 6-10 times [4]
- More than 10 times [5]
- Refused [999]

9.32 **ICAST26**

Was there a time in the past month when **Childs first name (3.3)** did not get the medical care for an injury or illness that he/she needed at that time?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Not in the past month but happened before [7]
- Don't Know [111]
- Refused [999]

Prerequisites
Skip when ***ICAST26 (9.32)*** **Equals 'No [0]'**
Skip when ***ICAST26 (9.32)*** **Equals 'Refused [999]'**
Skip when ***ICAST26 (9.32)*** **Equals 'Don't Know [111]'**

9.33 **ICAST26a**

Could you tell us what happened?

Expects a single line text response (**required**)

9.34 **ICAST27**

Was there a time in the past month when **Childs first name (3.3)** did not get the food or drink that he/she needed?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Not in the past month, but happened before [7]
- [ ] Don't Know [111]
- [ ] Refused [999]

Prerequisites
Skip when ***ICAST27 (9.34)*** **Equals 'No [0]'**
Skip when ***ICAST27 (9.34)*** **Equals 'Refused [999]'**
Skip when ***ICAST27 (9.34)*** **Equals 'Don't Know [111]'**

9.35 **ICAST27a**

Could you tell us what happened?

Expects a single line text response (**required**)

9.36 **ICAST28**

Was there a time in the past month when **Childs first name (3.3)** was seriously hurt or injured (cuts, broken bones or worse) when nobody was watching him/her?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Not in past month, but happened before [7]
- [ ] Don't Know [111]
- [ ] Refused [999]

9.37 **ICAST29**

Was there a time in the past month when **Childs first name (3.3)** was touched in a sexual way by an adult?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Not in past month but happened before [7]
- [ ] Don't Know [111]
- [ ] Refused [999]

9.38 **ICAST30**

Was there a time in the past month when **Childs first name (3.3)** had sex with an adult?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Not in the past month but happened before [7]
- [ ] Don't Know [111]
- [ ] Refused [999]

9.39 **ICAST31**

What kinds of discipline have you found to be most successful in changing **Childs first name (3.3)** 's behaviour in the past month?

Expects a single line text response (**required**)

9.40 **ICAST Thank you**

Thank you very much for answering these questions. We really appreciate you taking the time to help us with this research. Let's stretch and take a break before moving on to the next section.

Section 10. Feeling Sad

10.1 **Fun question 1**

What are you most proud of about yourself?

Expects a single line text response (**required**)

10.2 **Fun question 2**

What is the nicest thing anyone has said to you?

Expects a single line text response (**required**)

10.3 **Fun question 3**

Where do you feel most happy and comfortable?

Expects a single line text response (**required**)

10.4 **Fun question 4**

What is your favourite Soapie?

Expects a single line text response (**required**)

10.5 **Depression**

As a parent, we can experience all sorts of emotions. Some of these emotions can make us feel sad and unhappy. The next questions will ask about how you have been feeling over the past month.

10.6 **Depression1**

Please listen to each group of statements carefully. Choose one statement in each group that best describes the way you have been feeling over the past month. Some of these questions are difficult to answer so please try your best. There are no right or wrong answers!

10.7 **Sadness**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (**required**)

- [ ] I do not feel sad [0]
- [ ] I feel sad much of the time [1]
- [ ] I am sad all the time [2]
- [ ] I am so sad or unhappy that I cannot stand it [3]
- [ ] Refused [999]

10.8 **Pessimism**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (**required**)

- [ ] I am not discouraged about my future [0]
- [ ] I feel more discouraged about my future than I used to be [1]
- [ ] I do not expect things to work out for me [2]
- [ ] I feel my future is hopeless and will only get worse [3]
- [ ] Refused [999]

10.9 **Past failure**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (**required**)

- [ ] I do not feel like a failure [0]
- [ ] I have failed more than I should have [1]
- [ ] As I look back, I see a lot of failures [2]
- [ ] I feel I am a total failure as a person [3]
- [ ] Refused [999]

10.10 **Loss of pleasure**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (**required**)

- [ ] I get as much pleasure as I ever did from the things I enjoy [0]
- [ ] I don't enjoy things as much as I used to [1]
- [ ] I get very little pleasure from the things I used to enjoy [2]
- [ ] I can't get any pleasure from the things I used to enjoy [3]
- [ ] Refused [999]

10.11 **Guilty feelings**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (**required**)

- [ ] I don't feel particularly guilty [0]
- [ ] I feel guilty over many things I have done or should have done [1]
- [ ] I feel quite guilty most of the time [2]
- [ ] I feel guilty all of the time [3]
- [ ] Refused [999]

10.12 **Punishment feelings**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (**required**)

- [ ] I don't feel I am being punished [0]
- [ ] I feel I may be punished [1]
- [ ] I expect to be punished [2]
- [ ] I feel I am being punished [3]
- [ ] Refused [999]

10.13 **Self-dislike**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (**required**)

- [ ] I feel the same about myself as ever [0]
- [ ] I have lost confidence in myself [1]
- [ ] I am disappointed in myself [2]
- [ ] I dislike myself [3]
- [ ] Refused [999]

10.14 **Self-criticism**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (**required**)

- [ ] I don't criticize or blame myself more than usual [0]
- [ ] I am more critical of myself than I used to be [1]
- [ ] I criticize myself for all of my faults [2]
- [ ] I blame myself for all of my faults [3]
- [ ] Refused [999]

10.15 **Suicidal thoughts or wishes**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (**required**)

- [ ] I don't have any thoughts of killing myself [0]
- [ ] I have thoughts of killing myself, but I would not carry them out [1]
- [ ] I would like to kill myself [2]
- [ ] I would kill myself if I had the chance [3]
- [ ] Refused [999]

10.16 **Crying**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (**required**)

- [ ] I don't cry anymore than I used to [0]
- [ ] I cry more than I used to [1]
- [ ] I cry over every little thing [2]
- [ ] I feel like crying, but I can't [3]
- [ ] Refused [999]

10.17 **Agitation**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (optional)

- [ ] I am no more restless or wound up than usual [0]
- [ ] I feel more restless or wound up than usual [1]
- [ ] I am so restless or agitated that it's hard to stay still [2]
- [ ] I am so restless or agitated that I have to keep moving or doing something [3]
- [ ] Refused [999]

10.18 **Loss of interest**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (**required**)

- [ ] I have not lost interest in other people or activities [0]
- [ ] I am less interested in other people or things than before [1]
- [ ] I have lost most of my interest in other people [2]
- [ ] It's hard to get interested in anything [3]
- [ ] Refused [999]

10.19 **Indecisiveness**

Which of these statements describes the way you are feeling in the past month?

Expects a single option response (**required**)

- [ ] I make decisions about as well as ever [0]
- [ ] I find it more difficult to make decisions than usual [1]
- [ ] I have much greater difficulty in making decisions than I used to [2]
- [ ] I have trouble making any decisions [3]
- [ ] Refused [999]

10.20 **Worthlessness**

Which of these statements describes the way you have been feeling in the past month?

Expects a single option response (**required**)

- [ ] I do not feel I am worthless [0]
- [ ] I don't consider myself as worthwhile and useful as I used to [1]
- [ ] I feel more worthless as compared to other people [2]
- [ ] I feel utterly worthless [3]
- [ ] Refused [999]

10.21 **Loss of energy**

Which of these statements describes the way you have been feeling in the past month?

Expects a single option response (**required**)

- [ ] I have as much energy as ever [0]
- [ ] I have less energy than I used to have [1]
- [ ] I don't have enough energy to do very much [2]
- [ ] I don't have enough energy to do anything [3]
- [ ] Refused [999]

10.22 **Changes in sleeping pattern**

Which of these statements describes the way you have been feeling in the past month?

Expects a single option response (**required**)

- [ ] I have not experienced any change in my sleeping pattern [0]
- [ ] I sleep somewhat more than usual [1a]
- [ ] I sleep somewhat less than usual [1b]
- [ ] I sleep a lot more than usual [2a]
- [ ] I sleep a lot less than usual [2b]
- [ ] I sleep most of the day [3a]
- [ ] I wake up 1-2 hours early and can't get back to sleep [3b]
- [ ] Refused [999]

10.23 **Irritability**

Which of these statements describes the way you have been feeling in the past month?

Expects a single option response (**required**)

- [ ] I am no more irritable than usual [0]
- [ ] I am more irritable than usual [1]
- [ ] I am much more irritable than usual [2]
- [ ] I am irritable all the time [3]
- [ ] Refused [999]

10.24 **Changes in appetite**

Which of these statements describes the way you have been feeling in the past month?

Expects a single option response (**required**)

- [ ] I have not experienced any change in my appetite [0]
- [ ] My appetite is somewhat less than usual [1a]
- [ ] My appetite is somewhat greater than usual [1b]
- [ ] My appetite is much less than usual [2a]
- [ ] My appetite is much greater than usual [2b]
- [ ] I have no appetite at all [3a]
- [ ] I crave food all the time [3b]
- [ ] Refused [999]

10.25 **Concentration difficulty**

Which of these statements describes the way you have been feeling in the past month?

Expects a single option response (**required**)

- [ ] I can concentrate as well as ever [0]
- [ ] I can't concentrate as well as usual [1]
- [ ] It's hard to keep my mind on anything for very long [2]
- [ ] I find I can't concentrate on anything [3]
- [ ] Refused [999]

10.26 **Tiredness or fatigue**

Which of these statements describes the way you have been feeling in the past month?

Expects a single option response (**required**)

- [ ] I am no more tired or fatigued than usual [0]
- [ ] I get more tired or fatigued more easily than usual [1]
- [ ] I am too tired or fatigued to do a lot of things I used to do [2]
- [ ] I am too tired or fatigued to do most of the things I used to do [3]
- [ ] Refused [999]

10.27 **Loss of Interest in sex**

Which of these statements describes the way you have been feeling in the past month?

Expects a single option response (**required**)

- [ ] I have not noticed any recent change in my interest in sex [0]
- [ ] I am less interested in sex than I used to be [1]
- [ ] I am much less interested in sex now [2]
- [ ] I have lost interest in sex completely [3]
- [ ] Refused [999]

10.28 **Thanks feelings**

Thank you so much for answering these questions about how you are feeling. I know that it can be hard to talk about this so I really appreciate your honesty and patience.

Section 11. Parenting Stress

11.1 **Parenting stress**

Being a parent can be stressful, especially if your child has difficult behaviour. Please tell us how true these are for you and your child during the past month.

11.2 **Handling things**

In the past most I often had the feeling that I cannot handle things very well.

Expects a single option response (**required**)

- [ ] Strongly Agree [1]
- [ ] Agree [2]
- [ ] Not Sure [3]
- [ ] Disagree [4]
- [ ] Strongly Disagree [5]
- [ ] Refused [999]

11.3 **Meet child needs**

In the past month I found myself giving up more of my life to meet my child's needs than I ever expected.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.4 **Trapped**

In the past month, I felt trapped by my responsibilities as a parent.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.5 **Unable to do new and different things**

In the past month, I have been unable to do new and different things because of my child.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.6 **Do things I like**

In the past month, I have felt that I am almost never able to do things that I like to do because of my child.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.7 **Unhappy purchase**

I am unhappy with the last thing I bought or made for myself in the past month.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.8 **Bother**

In the past month, quite a few things have bothered me about my life.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.9 **Relationship problems**

In the past month I have had more problems than I expected in my relationship with my spouse/partner because of my child.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.10 **Alone**

In the past month, I felt alone and without friends.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.11 **Do not enjoy**

In the past month, I usually expect not to enjoy myself when I go to a party.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.12 **Not interested in people**

In the past month, I have not been as interested in people as I used to be.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.13 **Enjoy things**

In the past month, I haven't enjoyed things as I used to.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.14 **Feel bad about child**

In the past month, my child has rarely done things for me that make me feel good.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.15 **Child doesnt like me**

In the past month, I have felt that sometimes my child doesn't like me and doesn't want to be close to me.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.16 **Not appreciated**

In the past month, when I have done things for my child, I get the feeling that my efforts are not appreciated very much.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.17 **Child does not laugh**

In the past month, when I have been playing, my child doesn't often giggle or laugh.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.18 **Child slow at learning**

In the past month, my child has not seemed to learn as quickly as most children.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.19 **Child smiles less at me**

In the past month, my child has smiled at me much less than I expected.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.20 **Child not do as much as expected**

In the past month, my child has not been able to do as much as I expected.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.21 **Child not smile**

In the past month, my child has not smiled at me.

Expects a single option response (**required**)

- [ ] Strongly Agree [1]
- [ ] Agree [2]
- [ ] Not Sure [3]
- [ ] Disagree [4]
- [ ] Strongly Disagree [5]
- [ ] Refused [999]

11.22 **Child long time to get used to things**

In the past month, it has taken a long time and it has been very hard for my child to get used to new things.

Expects a single option response (**required**)

- [ ] Strongly Agree [1]
- [ ] Agree [2]
- [ ] Not Sure [3]
- [ ] Disagree [4]
- [ ] Strongly Disagree [5]
- [ ] Refused [999]

11.23 **Self assessment of parent**

How have you felt as a parent in the past month? (choose from these statements)

Expects a single option response (**required**)

- [ ] I feel that I am not good at being a parent [1]
- [ ] I feel that I am a person who has some trouble being a parent [2]
- [ ] I feel that I am an average parent [3]
- [ ] I feel that I am better than average parent [4]
- [ ] I feel that I am a very good parent [5]
- [ ] Refused [999]

11.24 **Feelings for child**

In the past month I expected to have closer and warmer feelings for my child than I do and this bothers me.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.25 **Child bothers me**

In the past month, my child has sometimes done things that bother me just to be mean.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.26 **Child cry or fuss**

In the past month, my child seems to cry or fuss more often than most children.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.27 **Child wake in bad mood**

In the past month, my child has generally woken up in a bad mood.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.28 **Child moody**

In the past month, I have felt that my child has been very moody and easily upset.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.29 **Child bother great deal**

In the past month, my child has done a few things which bother me a great deal.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.30 **Child reactive**

In the past month, my child has reacted very strongly when something happens that my child doesn't like.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.31 **Child easily upset**

In the past month, my child has been upset easily over the smallest thing.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.32 **Child schedule**

In the past month, my child's sleeping or eating schedule has been much harder to establish than I expected

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.33 **Number of things child bothers**

For the next statement, choose your response from the choices 10+ to 1-3. Think carefully and count the number of things which your child does that bothers you. For example: dawdles, refuses to listen, overactive, cries, interrupts, fights, whines, etc

Expects a single option response (**required**)

- [ ] 10 or more things [1]
- [ ] 8 to 9 things [2]
- [ ] 6 to 7 things [3]
- [ ] 4 to 5 things [4]
- [ ] 1 to 3 things [5]

11.34 **Getting child to stop**

For the next statement, choose your response from the choices 1 to 5 below (Interviewer: Show prompt card). I have found that getting my child to do something or stop doing something is:

Expects a single option response (**required**)

- [ ] Much harder than I expected [1]
- [ ] Somewhat harder than I expected [2]
- [ ] About as hard as I expected [3]
- [ ] Somewhat easier than I expected [4]
- [ ] Much easier than I expected [5]

11.35 **Child bothers a lot**

In the past month there have been some things my child does that really bother me a lot.

Expects a single option response (**required**)

- [ ] Strongly Agree [1]
- [ ] Agree [2]
- [ ] Not Sure [3]
- [ ] Disagree [4]
- [ ] Strongly Disagree [5]
- [ ] Refused [999]

11.36 **Child is problem**

In the past month, my child has turned out to be more of a problem than I had expected.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.37 **Child demands**

In the past month, my child has made more demands on me than most children.

Expects a single option response (**required**)

- Strongly Agree [1]
- Agree [2]
- Not Sure [3]
- Disagree [4]
- Strongly Disagree [5]
- Refused [999]

11.38 **Encouragement**

We really appreciate the time you are taking to answer these questions. Thank you so much!

11.39 **Thank you stress**

Once again, we really appreciate your time today. Your answers will help many families in South Africa. We are now moving to a new section.

Section 12. Substance Use

12.1 **Substance abuse 4**

We all respond to stress in different ways. Sometimes if we are stressed, we go for a walk, or talk to a friend, or take something to help us relax.

12.2 **Substance abuse notes**

The next questions are about what we do when we are stressed.

12.3 **Walk to relax**

In the past month, have you been for a walk or done some other exercise to help you relax?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

12.4 **Awareness exercise to relax**

In the past month, have you done a body relaxation or taken a cool down to help yourself relax?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

12.5 **Nap to relax**

In the past month, did you take a nap to help you relax?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

Prerequisites
Skip when ***Gender (1.10)*** **Equals 'Male [1]'**

12.6 **Extent of alcohol use women**

In the past month, have you had more than 3 drinks of alcohol in one day? By alcohol, I mean beer, traditional beer, wine, a cooler like Brutal Fruit, or spirits, like brandy or whisky.

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

Prerequisites
Skip when ***Gender (1.10)*** **Equals 'Female [0]'**

12.7 **Extent of alcohol use men**

In the past month, have you had 5 or more drinks in one day? By alcohol, I mean beer, traditional beer, wine, a cooler like Brutal Fruit, or spirits like brandy or whisky.

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

12.8 **Extent of drug use**

In the past month, did you take drugs to help you relax, have a good time, or escape from stress? When I talk about drugs, I don't mean cigarettes or snuff, I mean drugs like dagga, mandrax, tik, cocaine, heroin, sleeping pills, or other medication that you have used in a way that was not prescribed or not prescribed for you.

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

12.9 **Talk to friend to relax**

In the past month, did you talk to a friend to help yourself relax?

Expects a single option response (**required**)

- Yes [1]
- No [0]
- Refused [999]

12.10 **Substance abuse thanks**

Thank you again for being patient and honest!

Section 13. Challenges at Home

13.1 **Relationship at home 1**

This next section is intimate partner relationships. Being in a relationship can be challenging. No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, tired, or for some other reason.

13.2 **Relationship in the last month**

Are you in a relationship or have you been in a relationship in the last month?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Refused [999]

13.3 **Relationship at home 2**

These next questions are about your relationship with your partner. If you are not currently in a relationship, please answer these questions about any relationship you have had in your adult life.

Prerequisites
Skip when ***Relationship in the last month (13.2)*** **Not Equal 'Yes [1]'**

13.4 **Disagreements1**

Couples have many different ways of trying to settle their differences. Please answer how many times the following statements happened in the past month.

Prerequisites
Skip when ***Relationship in the last month (13.2)*** **Equals 'Yes [1]'**

13.5 **Disagreements2**

Couples have many different ways of trying to settle their differences. Please answer if you have experienced the following in your life.

13.6 **Compromise**

My partner explained his or her side or suggested a compromise for a disagreement with me.

Expects a single option response (**required**)

- [ ] Never happened [0]
- [ ] Happened before but not in the past month [5]
- [ ] Once in the past month [1]
- [ ] Twice in the past month [2]
- [ ] Three times in the past month [3]
- [ ] More than 3 times in the past month [4]
- [ ] Refused [999]

13.7 **My partner insulted or shouted or yelled**

My partner insulted or shouted or yelled or swore at me.

Expects a single option response (**required**)

- Never happened [0]
- Happened before but not in the past month [5]
- Once in the past month [1]
- Twice in the past month [2]
- Three times in the past month [3]
- More than 3 times in the past month [4]
- Refused [999]

13.8 **Sprain or bruise because of a fight**

I had a sprain, bruise, or small cut because of a fight with my partner.

Expects a single option response (**required**)

- Never happened [0]
- Happened before but not in the past month [5]
- Once in the past month [1]
- Twice in the past month [2]
- Three times in the past month [3]
- More than 3 times in the past month [4]
- Refused [999]

13.9 **My partner showed respect**

My partner showed respect for, or showed that he or she cared about my feelings about an issue we disagreed on?

Expects a single option response (**required**)

- Never happened [0]
- Happened before but not in the past month [5]
- Once in the past month [1]
- Twice in the past month [2]
- Three times in the past month [3]
- More than 3 times in the past month [4]
- Refused [999]

13.10 **My partner pushed or slapped me**

My partner pushed, shoved or slapped me.

Expects a single option response (**required**)

- Never happened [0]
- Happened before but not in the past month [5]
- Once in the past month [1]
- Twice in the past month [2]
- Three times in the past month [3]
- More than 3 times in the past month [4]
- Refused [999]

13.11 **Partner punched kicked beat**

My partner punched me, kicked me or beat me up.

Expects a single option response (**required**)

- Never happened [0]
- Happened before but not in the past month [5]
- Once in the past month [1]
- Twice in the past month [2]
- Three times in the past month [3]
- More than 3 times in the past month [4]
- Refused [999]

13.12 **Threat to hit me**

My partner destroyed something belonging to me or threatened to hit me.

Expects a single option response (**required**)

- Never happened [0]
- Happened before but not in the past month [5]
- Once in the past month [1]
- Twice in the past month [2]
- Three times in the past month [3]
- More than 3 times in the past month [4]
- Refused [999]

13.13 **I went to the doctor because of a fight**

I went to the doctor or needed to see a doctor because of a fight with my partner.

Expects a single option response (**required**)

- Never happened [0]
- Happened before but not in the past month [5]
- Once in the past month [1]
- Twice in the past month [2]
- Three times in the past month [3]
- More than 3 times in the past month [4]
- Refused [999]

13.14 **Forced sex**

My partner used force (like hitting, holding down or using a weapon) to make me have sex.

Expects a single option response (**required**)

- Never happened [0]
- Happened before but not in the past month [5]
- Once in the past month [1]
- Twice in the past month [2]
- Three times in the past month [3]
- More than 3 times in the past month [4]
- Refused [999]

13.15 **Sex without a condom**

My partner insisted on sex when I did not want to or insisted on sex without a condom (but did not use physical force).

Expects a single option response (**required**)

- Never happened [0]
- Happened before but not in the past month [5]
- Once in the past month [1]
- Twice in the past month [2]
- Three times in the past month [3]
- More than 3 times in the past month [4]
- Refused [999]

13.16 **Thanks challenges at home**

Thank you for answering these questions. I know they are difficult and may bring up challenging emotions for you. If you have any questions after the interview, we will give you a list of numbers and contacts that might help.

Section 14. Experience Growing Up

14.1 **Questions about your early life**

The next questions are about your early life, from when you were a small child to before you were 18 years old. These questions are about violent or upsetting things that can happen to children and young people.

14.2 **Questions about your early life1**

We know that it is difficult to talk about these things. Remember, everything you tell me is private. No-one in your family, your neighbourhood or the authorities will know what you tell us.

14.3 **Questions about your early life 2**

Please answer all of the questions even if you think some of them do not apply to you.

14.4 **Physical abuse**

When you were growing up (before age 18), did any adult in your household ever do the following? (You can choose more than one)

Expects multiple selected options (**required**)

- [ ] Hit, punch or kick you very hard [1]
- [ ] Beat you very hard with an object like a stick cane, whip or belt [2]
- [ ] Shake your body very hard so that it hurt you [3]
- [ ] Stab or cut you with a knife or sharp object [4]
- [ ] None of these things happened to me [0]
- [ ] Cannot remember [111]
- [ ] Refused [999]

Prerequisites
Skip when ***Physical abuse (14.4)*** **Includes 'None of these things happened to me [0]'**
Skip when ***Physical abuse (14.4)*** **Includes 'Cannot remember [111]'**
Skip when ***Physical abuse (14.4)*** **Includes 'Refused [999]'**

14.5 **Frequency of physical abuse**

How often did any of the previous experiences happen to you?

Expects a single option response (**required**)

- [ ] 1 to 2 times [1]
- [ ] 3 to 10 times [2]
- [ ] More than 10 times [3]
- [ ] Refused [999]

14.6 **Verbal abuse**

When you were growing up (before age 18), did any adult in your household ever do any of the following? (You can choose more than one)

Expects multiple selected options (**required**)

- [ ] Insult and criticise you to make you feel that you were bad, stupid, or worthless [1]
- [ ] Say that you were not loved or did not deserve to be loved [2]
- [ ] Say that they wished you had never been born or were dead [3]
- [ ] Threaten that you would be badly hurt or killed [4]
- [ ] Threaten to abandon you or refuse to let you live in the home anymore [5]
- [ ] None of these ever happened to me [0]
- [ ] Cannot remember [111]
- [ ] Refused [999]

Prerequisites
Skip when ***Verbal abuse (14.6)*** **Includes 'None of these ever happened to me [0]'**
Skip when ***Verbal abuse (14.6)*** **Includes 'Cannot remember [111]'**
Skip when ***Verbal abuse (14.6)*** **Includes 'Refused [999]'**

14.7 **Frequency of verbal abuse**

How often did any of the previous things happen?

Expects a single option response (**required**)

- [ ] 1 to 2 times [1]
- [ ] 3 to 10 times [2]
- [ ] More than 10 times [3]
- [ ] Refused [999]

14.8 **Events that may have happened**

Sometimes things happen that make children feel very frightened or worried. They may also be made to feel embarrassed or ashamed or unloved.

14.9 **Events that may have happened1**

Remember, all of these answers are completely confidential and will not be seen by anyone in the community. Thank you for being truthful and patient!

14.10 **Sexual abuse**

When you were growing up (before age 18), did anyone ever do any of the following when you did not want them to? You can choose more than one.

Expects multiple selected options (**required**)

- [ ] Expose their private parts (genitals) to you [1]
- [ ] Make you pose naked in front of other people or for photographs, video, or internet [2]
- [ ] Touch your private parts (genitals) [3]
- [ ] Made you touch their private parts (genitals) [4]
- [ ] Have sexual intercourse with you [5]
- [ ] None of these things ever happened to me [0]
- [ ] Cannot remember [111]
- [ ] Refused [999]

Prerequisites
Skip when ***Sexual abuse (14.10)*** **Includes 'None of these things ever happened to me [0]'**
Skip when ***Sexual abuse (14.10)*** **Includes 'Cannot remember [111]'**
Skip when ***Sexual abuse (14.10)*** **Includes 'Refused [999]'**

14.11 **Sexual abuse frequency**

How often did any of the previous things happen to you?

Expects a single option response (**required**)

- [ ] 1 or 2 times [0]
- [ ] Between 3 - 10 times [2]
- [ ] More than 10 times [3]
- [ ] Refused [999]

Prerequisites
Skip when ***Sexual abuse (14.10)*** **Includes 'None of these things ever happened to me [0]'**
Skip when ***Sexual abuse (14.10)*** **Includes 'Cannot remember [111]'**
Skip when ***Sexual abuse (14.10)*** **Includes 'Refused [999]'**

14.12 **Ever told anyone about sexual violence**

Have you ever told any person about unwanted sexual experiences before now?

Expects a single option response (**required**)

- [ ] Yes [1]
- [ ] No [0]
- [ ] Refused [999]

14.13 **Thanks growing up**

Thank you very much for answering these challenging questions. We really appreciate how patient you have been. We are almost done. The next section is the last section.

Section 15. Social Support

15.1 **Social support note**

People often seek companionship, assistance or other types of support from others, especially when they are facing challenges. Sometimes we feel well-supported and other times we may feel alone.

15.2 **Social support note1**

The next questions will ask you about the people that may support you. I am going to read you several statements and ask you how often this occurred for you in the past month.

15.3 **Someone to Listen**

How often could you count on someone to listen to you when you needed to talk within the last month?

Expects a single option response (**required**)

- None of the time [1]
- A little of the time [2]
- Some of the time [3]
- Most of the time [4]
- All of the time [5]
- Refused [999]

15.4 **Someone to give advice**

How often could you count on someone to give you good advice about a crisis within the last month?

Expects a single option response (**required**)

- None of the time [1]
- A little of the time [2]
- Some of the time [3]
- Most of the time [4]
- All of the time [5]
- Refused [999]

15.5 **Someone to give information**

How often could you find someone to give you information to help you understand a situation within the last month?

Expects a single option response (**required**)

- None of the time [1]
- A little of the time [2]
- Some of the time [3]
- Most of the time [4]
- All of the time [5]
- Refused [999]

15.6 **Someone to confide in**

How often could you confide in or talk to someone about yourself or your problems within the last month?

Expects a single option response (**required**)

- None of the time [1]
- A little of the time [2]
- Some of the time [3]
- Most of the time [4]
- All of the time [5]
- Refused [999]

15.7 **Someone whose advice you really want**

How often could you get advice from someone you really wanted within the last month?

Expects a single option response (**required**)

- None of the time [1]
- A little of the time [2]
- Some of the time [3]
- Most of the time [4]
- All of the time [5]
- Refused [999]

15.8 **Share private worries and fears**

How often could you share your most private worries and fears with someone within the last month?

Expects a single option response (**required**)

- None of the time [1]
- A little of the time [2]
- Some of the time [3]
- Most of the time [4]
- All of the time [5]
- Refused [999]

15.9 **Someone for suggestions**

How often could you turn to someone for suggestions about how to deal with a personal problem within the last month?

Expects a single option response (**required**)

- None of the time [1]
- A little of the time [2]
- Some of the time [3]
- Most of the time [4]
- All of the time [5]
- Refused [999]

15.10 **Someone understands problems**

How often could you find someone who understands your problems within the last month?

Expects a single option response (**required**)

- None of the time [1]
- A little of the time [2]
- Some of the time [3]
- Most of the time [4]
- All of the time [5]
- Refused [999]

Section 16. Closing

16.1 **Closing**

We are almost done! We really appreciate the effort you have put into answering these questions.

16.2 **If you were minister of children**

We have just one more question. If you were minister of children and families, what are three things you would do to help parents and children?

Expects a long text response (**required**)

16.3 **Thank you**

Thank you for your valuable time and for sharing this information with me. We really value what you do as a caregiver!

Section 17. End

17.1 **End instruction**

End instruction to interviewer: You have reached the end of the questionnaire. Please press Back to review your responses or press Next to submit the survey.

Appendix B: Sample Facilitator Checklist

SINOVUYO KIDS SAMPLE FACILITATOR CHECKLIST

DID WE…	YES	NO	LEADER
1. Welcome each parent as they came in			
2. Emotional Check-in			
3. Physical Exercise			
4. Show parents progress on Rondavel/Tree			
5. Home Practice Discussion			
6. Discussion about Special Time with Toto			
7. Identify Building Blocks of Special Time			
8. Get Parents to Participate in Discussion			
9. Story: When we do not pay attention			
10. Story: Following Child's Lead			
11. Group Discussion: Activities to Do With Your Child			
12. Group Practice: Leaders demonstrate poor parenting			
13. Group Practice: Parents practice good parenting			
14. Group Practice in Groups			
15. Discussion about Group Practice			
16. Discussion about Useful Tips for Special Time			
17. Introduce Home Practice and Discuss with Parents			
18. Distribute Parent Handbook			
19. Review Activities			
20. Emotional Check-Out			
21. Thank and Praise Parents			

Appendix C: Participant Feedback Sheet

SINOVUYO CARING FAMILIES PROJECT

Dear Parent,

Thank you so much for being a part of the *Sinovuyo Caring Families Project.* We really appreciate your assistance in helping parents and children in South Africa.

The Sinovuyo research found some interesting information about parents that we would like to share with you:

- **97% of parents used positive ways of disciplining their children.** This means things like **explaining** to them why something is wrong and what to do instead.

  "If you want your sister to play with you, speak nicely to her instead of shouting."

  Sharing a fun activity (even for just 5 minutes a day) can strengthen the relationship between you and your child (for example drawing, cooking, playing ball games, etc.). Having a good relationship makes it easier for your child to respect and follow rules.

  Praising children for what they do right is important because children can learn what you want them to do.

  "You have done a great job! I'm proud of you! Thank you for cleaning the plates."

- **46% of parents also said they used physical discipline, like hitting towards their children.** Hitting is not effective because it does not give them a chance to learn what to do instead of the bad behaviour.

- **27% of parents said they didn't have someone who will listen to them if they need to talk about a problem.** Having someone to trust is important because it reduces stress and helps parents to manage their daily challenges.

There are many challenges that parents and children can experience. Here are the details of some organisations that may be able to help you if you or someone in your family has a problem:

DRINKING & DRUG ABUSE

Cape Town Drug Counselling Centre
Address: 1 Roman Road, Observatory
Tel: 021 447 8026

INTIMATE PARTNER VIOLENCE

SAMILA
Address: Noah Building, Site B, Khayelitsha
Tel: 021 364 8521

PARENTING

Ubuntu Africa Child Healthcare
Address: Y. 325 82 Vaphi Street, Site B Khayelitsha
Tel: 021 827 0446

The Parent Centre
Address: 123 Cnr Main Road & Piers Road, Wynberg
Tel: 021 762 0116

GENERAL HELP

IKamva Labantu
Helpdesk offers referral information, help and support for any challenges

Tuesday 8.30 12.00 @ Kwakhanya Early Childhood Development Centre, Eyetu, Khayelitsha

Friday 8.30 12.00 @ Rainbow Centre on the corner of NY135 and NY 136, Gugulethu

LEGAL PROBLEMS

Athlone Justice Centre
Address: Floor 2 Melofin Ctr, Old Klipfontein Road, Athlone
Tel: 021 697 5252

PROBLEMS WITH CHILDREN'S BEHAVIOUR

Empilweni: Place of Healing
Address: Metropolitan Building, Corner of Spine & Ntlazane Roads, Ilitha Park, Khayelitsha
Tel: 021 361 7063

HEALTH PROBLEMS

IKamva Labantu
Address: 6 Malambo Street, Eyethu, Khayelitsha
Tel: 021 361 0909

Appendix D: Certificate for Study Participation

SINOVUYO CARING FAMILIES PROJECT

Has participated as an

Assistant Researcher

in the development of parenting programmes for families in South Africa

Thank you, and congratulations!

Appendix E: Original Ethics Approval Letters

UNIVERSITY OF CAPE TOWN

Department of Psychology

University of Cape Town Rondebosch 7701 South Africa
Telephone (021) 650 3414
Fax No. (021) 650 4104

24 February 2014

A/Prof. Catherine Ward
Department of Psychology
University of Cape Town
Rondebosch 7701

Dear Prof. Ward,

I am pleased to inform you that ethical clearance has been given by an Ethics Review Committee of the Faculty of Humanities for your Sinovuyo Caring Families project. The reference number is PSY2014-001.

I wish you all the best for your study.

Yours sincerely,

Signed

Johann Louw PhD
Professor
Chair: Ethics Review Committee

SOCIAL SCIENCES & HUMANITIES
INTER-DIVISIONAL RESEARCH ETHICS COMMITTEE

Hayes House, 75 George Street, Oxford. OX1 2BQ
Tel: +44(0)1865 614871 Fax: +44(0)1865 614855
ethics@socsci.ox.ac.uk www.socsci.ox.ac.uk

Co-ordinator of the IDREC
Social Sciences Divisional Office

Wednesday, 9 November 2011

Dr Lucie Cluver
Department of Social Policy and Intervention

Dear Lucie,

Research Ethics Approval

Ref No.: SSD/CUREC2/11-40

PACCASA (Preventing Abuse of Children in the Context of AIDS in sub-Saharan Africa)

The above application has been considered on behalf of the Social Sciences and Humanities Inter-divisional Research Ethics Committee (IDREC) in accordance with the procedures laid down by the University for ethical approval of all research involving human participants.

I am pleased to inform you that, on the basis of the information provided to the IDREC, the proposed research has been judged as meeting appropriate ethical standards, and accordingly approval has been granted.

Should there be any subsequent changes to the project, which raise ethical issues not covered in the original application, you should submit details to the IDREC for consideration.

Yours sincerely,

Signed

Kerry Vernon

cc: Gemma Roche, Department of Social Policy and Intervention

KV/EB

Appendix F: Consent Form for RCT Participation

SINOVUYO CARING FAMILIES PROJECT

SINOVUYO PARTICIPANT CONSENT FORM

Uzakunikwa ikopi enolwazi kwakunye nefomu yesivumelwano ukuba uyigcine.
You will be given an information copy and agreement form for you to keep.

Kuse kuthandeni kwakho ukuba awufuni okanye uyafuna kuba yinxalenye yesisifundo.
It is up to you if you want to take part of this study or not.

Kwakhona, ungazigqibela xa ufuna ukuyeka ukuba yinxalenye yesisifundo nangaliphi na ixesha ngaphandle kokuba kubekho nto embi ekwehlelayo okanye ulahlekane nayiphi na inzuzo onokubanayo.
Again you can decide if you want to quit in this study at anytime you want without anything bad happening to you or you won't loose nothing.

Ukuba uziva ufuna ukuyeka nangaliphi na ixesha , ungaxelela omnye kwiqela laphandi.
If you want to cancel at anytime just tell one of the research team.

1. Uyifundile lenkcukacha waze wayiqonda lenkcukacha inikwe apha?
1. Did you read this information and understand information that has been given here?

Yes/*Ewe* ___ No/*Hayi*___

2. Uye wabanalo ithuba lokubuza imibuzo, wafumana impendulo, waza wakwazi ukubuza ulwazi ngokongezelelweyo kwiqela labaphandi?
2. Did you get a chance of asking questions, get answers and ask some more from the information research team?

Yes/*Ewe* ___ No/*Hayi*___

3. Uyaqonda ukuba ungayeka kwesisifundo ngapahandle kokudliwa nangaliphina ixesha ngokuxelela omnye weqela labaphandi.
3. Are you really understand that you can cancel anytime from the study without being penalized by just telling one of the research team?

Yes/*Ewe* ___ No/*Hayi*___

4. Ingaba uyaqonda ukuba ngubani onokubona inkcukacha zakho, nokuba ezi nkcukacha zingcinwe njani,nokuba kwezekantoni kulenkcukacha ekupheleni kwesifundo?
4. Do you understand who will be having an access to your information, and how this information has been kept after the study has been finished.

Yes/*Ewe* ___ No/*Hayi*___

5. Uyaqonda ukuba sifumanise ukuba untwana wakho uyyewahlukunyezwa amaxsha amaninzi okanye wangahoywa, sizakunyanzeleka sichazele abasemthethweni?
5. Do you understand that if we find that your child is being severely abused or neglected, we have to report it to the relevant authorities?

Yes/*Ewe* ___ No/*Hayi*___

6. Ingaba uyaqonda ukuba wena nomntwana wakho nizakushicilelwa , kwaye elicwecwe lizakusetyenziswa kuphela kuncedo lwezifundo.
6. Do you understand that you and your child will be recorded on video, and the aim of the video will only be used on educational purposes?

Yes/*Ewe* ___ No/*Hayi*___

Ndicela utyikitye igama lakho ukuba uyayiqonda ukuba singantoni isifundo kwaye uyavuma ukuthatha inxaxheba.
Please sign your name if you understand what this is this all about and agree to take part.

_____ _____
Kutyikitye umntu onika imvume *Bhala igama ngokucacileyo*
Signature of person giving consent Printed name

_____ _____
Igama lomntwana *Inombolo yomnxeba*
Name of child Your contact number

_____ _____
Umhla *Indawo*
Date Place

Ndicela nityikitye igama ukuba uyavuma ukuba wena nomntwana wakho nishicilelwe kwiVidiyo
Please sign your name if you agree to you and your child being recorded by video:

_____ _____
Kutyikitye umntu onika imvume *Bhala igama ngokucacileyo*
Signature of person giving consent Printed name

_____ _____

Igama lomntwana *Inombolo yomnxeba*
Name of child Your contact number

_____ _____

Umhla *Indawo*
Date Place

_____ _____

Kutyikitye ingqina *Bhala igama ngokucacileyo*
Signature of person witnessing consent Printed name
(***only if participant has literacy problems)***
(kuphela xa ngaba umthathi nxaxheba unengxaki yokufunda)

_____ _____

Umhla *Indawo*
Date Place

_____ _____

Kutyikitye umphandi ofumana imvume *Bhala igama ngokucacileyo*
Signature of researcher gaining consent Printed name

_____ _____

Umhla *Indawo*
Date Place

Ukuba unawo umbuzo okanye ugqibe ukuba awusafuni ukuthath' inxaxheba, nceda uxelele nawuphi na umphathi nkqubo okanye umvavanyi
If there's another questions or you decide not to continue anymore, you can tell one of the facilitators or interviewers.

You can also contact Project Manager, Inge Wessels (079 097 3013), Dr Catherine Ward (021 650 3422), or Dr Lucie Cluver (082 650 5815)
Ungaqhakamshelana nomphathi projekthi.

Enkosi!
Thank you!

Appendix G: Information Sheet for RCT Participation

SINOVUYO CARING FAMILIES PROJECT

INFORMATION SHEET

Dear Sir or Madam,

You are being invited to take part in a research study called the Sinovuyo Caring Families Project.

Before you decide whether you want to be a part of the study, it is important for you to understand why the research is being done and what it will involve.

The following information will be read and explained to you carefully.

You will have a chance to ask any questions that you may have.

If something is not clear, that you would like more clarification for, please ask us.

Thank you!

What is the purpose of the study?

We are doing this study so that we can better understand how to improve the lives of children and families in South Africa.

Specifically, we are interested in how a parenting programme might help improve children's behaviour and help parents cope with challenges in their lives.

Who can participate?

In order to participate, you need to have a child who is between the ages of 2 and 9.

You need to be the caregiver that spends the most time with the child.

If you have more than one child between the ages of 2 and 9, we would like you to select the one with the most challenging behaviour.

This child needs to live in the same household as you for at least 4 nights a week.

Lastly, in order to participate you will have to provide consent to confirm you are willing to participate.

Do I have to participate?

NO. It is up to you to decide if you want to take part in the study. If you decide to take part, you will need to sign a consent form to allow us to include you and your child in the study.

You can stop being a part of the study at anytime without giving a reason. There will be no penalty for doing this.

What would happen if I take part?

- First, you will be given a chance to ask any questions that you have about the study.
- When you understand everything about the study, you will be asked to sign a consent form agreeing to take part in the study.
- It is up to you to decide whether you want to take part, but you must sign the consent form in order to participate.
- Then, we will ask you a few questions about you and your child's behaviour. This is to know whether you are eligible for the study.
- If you are not eligible for the study, we will talk to you about some other information that may help you with the challenges that you are facing.
- If you are eligible for the study, we will visit you at your home again to ask you some more questions about you and your child. This will take about an hour. If there are any questions that you feel uncomfortable answering, you will not have to answer them.
- We will enter the answers to the questions into a cellphone while we speak to you. If you want, you can enter the answers by yourself. There will also be a research assistant who can assist you with answering the questions.
- As soon as we are done with the interview, your answers will be sent to a secure database that only our research team will have access to.
- This means that no one else will ever be able to see the answers to your questions. Your answers will not be written down anywhere – they will only be in the database.
- After going through the questions, we will set a date to come and visit you at home. We will remind you of this date before the visit.
- At this visit, we will observe you and your child together. This will include some time for play, cleaning up, and sharing a meal. This will take around 40 minutes.
- After these visits, you will be invited to attend a Health and Wellness Day. At this event, you will have the chance to receive information and training about financial planning, health, and community support.
- After Health and Wellness Day you we will come visit you and your child to test if you child has a learning problem.
- During this test we will ask you to ask your child to play some games with a research assistant. The games are simple and the research assistant will explain them to your child.
- These games will last for one to one and a half hours.
- At the end of the games we will give you and your child a snack to enjoy together.
- To thank you for your time, we will provide you with a R20 Shoprite Voucher and a toy for your child.
- You will then be entered into a lottery system in a computer. The computer will randomly put you in one of two groups.

- The first group will receive an information pack that may be helpful in addressing some of the challenges that you may be facing.
- The second group will receive a 12-session programme for parents to help them learn how to manage their child's behaviour.
- The programme will include activities both during the sessions and for practice at home. Although you will be encouraged to participate in the activities, you do not need to do anything you do not wish to do.
- Your child will not attend any sessions, but you will have some activities to do at home each week with your child.
- During the programme, we may photograph or video some of the sessions to document how it is being done by the group leaders. If you do not want to have your photo taken, please tell us and we will be happy to oblige.
- If you are not able to attend a session, a group leader will set a time for the session to be done at home.
- After the programme is finished, we will visit ALL participants at home again. This includes participants that get the parenting programme and participants that get the information pack.
- To thank you for your time and commitment to the study you will be provided with a R30 Shoprite voucher.
- At this visit, we will ask you the same questions that we will at the beginning of the study. We will also observe you and your child together.
- After one year we will visit you to ask you the same questions again to see if there are any changes in your life and your child's life. During this visit you will receive a R50 Shoprite Voucher to thank you for you commitment and time in this study.
- After this, we may ask you to join a focus group discussion. During the focus group we welcome you to tell us about how you felt about the study.
- You can decide to stop the study or programme at any time. There will be no penalty or denial of services if you decide to leave the study or programme.

What will happen to the information I provide?

- Participation in this study means that you share some personally identifying information with us such as your name, address, and phone number.
- This information will never be given to others. It will only be used for the purpose of the study. You will be given a unique study number so that your name will not be known by anyone outside of the research team.
- The answers to your questions will be typed into a cell phone, and as soon as the interview is done, the answers will be sent to a secure server.
- Only the research team will have access to this information, and it will not be saved or written down anywhere else.
- **The research team** will protect your personal information and comply with all applicable laws.
- All of the information will be stored in a locked file cabinet and computer protected by a password. Only research staff working on this study can look at this information.

What will happen to the results of the research?

Any research publication will not identify you or your child individually. After the study is finished, we would be delighted to share with you the results as soon as they are available.

Who has reviewed the study?

This study has received ethical approval from University of the Oxford Central University Research Ethics Committee (ref: SSD/CUREC2/11-40) and the University of Cape Town Psychology Department Research Ethics Committee (ref: PSY2014-001).

Who is responsible for this study?

Dr Lucie Cluver, from Oxford University, and Dr Catherine Ward, from the University of Cape Town, are the Principal Investigators for the study.

Ms Inge Wessels, a doctoral student at the University of Cape Town, is the Project Manager and will be collaborating with our research team.

Why should you participate in this study?

You will receive no direct payment for participating in this study. By participating, you will receive either a parenting programme or an information pack that may assist you with some of the challenges that you are facing.

This research will help us understand how to improve the lives of children and their families in South Africa.

Questions

If you have any questions or concerns about this study, please ask any member of the research team.

Dr Lucie Cluver

Dept of Social Policy & Intervention
University of Oxford
England OX1 2ER

Telephone in UK: +441865280370
Telephone in South Africa: 0826505815

When not in South Africa, an SMS can be sent to: +44798085651 or +4915204588976

Email: lucie.cluver@spi.ox.ac.uk

Dr Catherine Ward

Dept of Psychology
University of Cape Town
Rondebosch 7701
South Africa

Telephone: 0216503422

Email: Catherine.ward@uct.ac.za

Ms Inge Wessels

Dept of Psychology
University of Cape Town
Rondebosch 7701
South Africa

Telephone: 0790973013

Email: inge.m.wessels@gmail.com

Appendix H: Certificate for Programme Participation

Clowns Without Borders South Africa
and Ikamva Labantu hereby present a…

Certificate of Completion

for participation in the
Sinovuyo Caring Families Programme

_____
Name of Participant

_____ _____ _____
Group Leader *Group Leader* *Group Leader*

_____
Date

Appendix I: Approval of Ethics Amendment

SOCIAL SCIENCES & HUMANITIES
INTER-DIVISIONAL RESEARCH ETHICS COMMITTEE

Research Services, University of Oxford, Wellington Square, Oxford OX1 2JD
Tel: +44(0)1865 616576 Fax: +44(0)1865 280467
ethics@socsci.ox.ac.uk

Co-ordinator of the SSH IDREC
Research Services

25 August 2015

Prof Lucie Cluver
Social Policy & Intervention

Dear Lucie Cluver

Amendment of research ethics application

Ref No: SSD/CUREC1A/C2 11-40

Title: PACCASSA

Number of Amendment and month notification received: 4 – Aug 2015

Subject of amendment: Minor changes to proposed protocol

The above request for amendment has been reviewed on behalf of the Social Sciences and Humanities Inter-Divisional Research Ethics Committee (IDREC).

I am pleased to inform you that, on the basis of the information provided to the IDREC, this amendment has been judged as meeting appropriate ethical standards.

Yours sincerely,

Claudia Kozeny-Pelling
Co-ordinator & Secretary SSH IDREC

cc: Catherine Ward
Inge Wessels

CKP/JM

Appendix J: Approval Documentation from Thesis Committee

DEPARTMENT OF PSYCHOLOGY

REPORT OF THESIS COMMITTEE

Student Name: WESSELS I

Student #: WSSING002

Degree: PhD

Title (as proposed) Understanding engagement in parenting programmes in low-income contexts

Supervisor: C WARD

Co-supervisor:

Committee members: J LOUW

L WILD

D KAMINER

WE:

1. Approve the proposal, and recommend that the student continue with the research.

2. Approve the proposal, and recommend that the student may continue with the research. However, we recommend that change(s), as noted below, be incorporated in the research, to the satisfaction of the supervisor.

3. Approve the proposal in terms of its ethical implications. If necessary, explanatory notes appear below.

4. Find the proposal unsatisfactory, for the reason(s) listed below. The student is hereby requested to re-present the proposal to a departmental thesis committee by _____.

NOTES:

DEPARTMENT OF PSYCHOLOGY

TERMS OF REFERENCE OF DEPARTMENTAL THESIS COMMITTEES

Students doing the research degrees in psychology (M.A. and M. Soc. Sc.) are required to present a research proposal to a departmental thesis committee before the end of May of the first year of registration for the degree.

The committee will be constituted by the supervisor in consultation with the course convenor, and will consist of at least the Head of Department (ex officio), supervisor and three Department of Psychology staff members.

Students submit their proposals in written format to individual members at least one week before the scheduled presentation. The supervisor will act as chairperson at the presentation of the research proposal.

The committee is not an examination body, but it acts to approve a student's research proposal, and hence continued registration as a Master's student. It may make recommendations at the following levels:

- Approve the proposal, and that the student may continue with the research. The committee also acts in an advisory capacity, and may recommend changes to the research. Under normal circumstances it will be left to the discretion of the supervisor and student whether to incorporate such changes or not, unless the committee specifies that a particular recommendation has to be incorporated in the research. In such cases the committee is requested to submit a brief statement, containing the relevant details, to the course convenor. (The committee may elect a reporting member to do this).

- Refer the proposal back to the student, and request re-presentation within a specified period. Again the course convenor has to be informed of this in writing. If, at the second presentation, the committee still regards the proposal as unsatisfactory, it may recommend that the student de-registers due to lack of progress. Should this happen, the committee's decision will be conveyed via the course convenor to the Head of the Department, to whom both the student and the supervisor have the right to appeal. Students have a further right of appeal to the Dean.

The committee also considers the ethical implications of the study, and act as the departmental body that approves it in this regard.

UNIVERSITY OF CAPE TOWN

Department of Psychology

University of Cape Town Rondebosch 7701 South Africa
Telephone (021) 650 3414
Fax No. (021) 650 4104

25 January 2016

A/Prof. Catherine Ward
Department of Psychology
University of Cape Town
Rondebosch 7701

Dear Prof. Ward,

I refer to the documentation that you submitted with regard to a randomised controlled trial of the Sinovuyo Caring Families Programme. The Research Ethics Committee of the Department of Psychology approved this in February 2014, with PSY2014-001 as a reference number. I am pleased to inform you that ethical clearance for this project, with the amendments you indicated, is still applicable.

Yours sincerely,

Johann Louw PhD
Professor
Chair: Ethics Review Committee

Appendix K: Consent Form for Individual Qualitative Interviews

CONSENT FORM

Dear Parent,

Thank you very much for taking part in the research for the Sinovuyo Caring Families Project.

You are being invited to take part in another interview that will explore parents' experiences of the *Sinovuyo Caring Families Programme*. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what it will involve.

The following information will be read and explained to you carefully. You will have a chance to ask any questions that you may have. If something is not clear, please let us know and we will explain it again.

What is the purpose of this interview?

This research will help us understand what can make it difficult for parents to come to a parenting programme. It can also help us learn about what can make it easier to come to a programme. Knowing these things can help us improve programmes so that more parents can benefit.

Who can participate?

We will be asking caregivers who were invited to the Sinovuyo programme about their experiences.

Do I have to participate?

No, it is your choice if you want to take part in the study. You are free to refuse to answer any question that I ask you. Also, you can stop the interview at any time without giving a reason. If you do this, there will be no penalty. It also will not affect your relationship with the Sinovuyo Caring Families Project.

What would happen if I take part?

If you decide to participate, you will be interviewed for about 60 minutes. We will record what you say on this audio recorder. There are no right or wrong answers – we just would like to hear your thoughts.

What will happen to the information I provide?

Everything that you tell me will be confidential, which means that your name and identity will be kept private. There will be no link between the informed consent form and the information given during the interview.

Only the research team will have access to your information, and it will not be sThe research team will protect your personal information. All of the information will be stored in a locked file cabinet and computer protected by a password. Any research report will not identify you or your child individually.

If we find that your child is being severely abused or neglected, we will have to report it to the relevant authorities.

Who has reviewed the study?

This study has received ethical approval from the Research Ethics Committees at the University of Cape Town as well as the University of Oxford.

Who is responsible for this study?

Ms Inge Wessels, a doctoral student in the Department of Psychology at the University of Cape Town, is responsible for this study. Professor Catherine Ward, also from this department, will be supervising her work.

Why should you participate in this study?

You will not be paid for this interview but we are happy to offer you a R30 Shoprite voucher for your participation. There are no foreseeable risks to participating in the study. This research will help us understand how to improve the lives of children and their families in South Africa.

Questions:

If you have any questions about the study, please contact Ms Inge Wessels on 083 554 1791 or Professor Catherine Ward on 021 650 3422

INFORMED CONSENT

I have read the above information or someone has read it to me. I have had a chance to ask questions, and these have been answered. I understand that I am able to stop the interview at any time without any penalty. I understand that the interview will be recorded. I understand who will have access to my information, and how this information will be stored. I have been offered a copy of this consent form.

Please sign your name if you understand what this is all about and agree to take part.

_____	_____
Signature of person giving consent	Name and surname
_____	_____
Date	Place
_____	_____
Signature of person witnessing consent (***only if participant has literacy problems)***	Name and surname
_____	_____
Date	Place
_____	_____
Signature of researcher gaining consent	Name and surname
_____	_____
Date	Place

Appendix L: Interview Schedule for High Attenders

Department of Psychology, University of Cape Town

SINOVUYO POST-INTERVENTION INTERVIEW SCHEDULE

For parents that attended 8 or more SCFP sessions

- Thank you for signing the consent form, and agreeing to take part in the interview. You are giving a great deal of help to families in South Africa by doing this. Thank you very much!

- I am interested to know what you thought and felt about the Sinovuyo Caring Families Programme.

  (Open-ended question to get a sense of the parent's attitude towards the programme. It will also set the scene for the following questions that are specific to barriers to attendance.)

- Why did you want to attend the programme?

- We can see that you attended most of the Sinovuyo Caring Families Programme. We would like to know what made it possible for you to attend almost all or all of the sessions? Was it easy for you to attend – or what did you need to do to make it easy for you to attend?

- What happened for you to attend the first session? What were your thoughts and feelings about going that day? What made it possible for you to keep attending?

EXAMPLES OF PROBING QUESTIONS:

- How did your family feel about you attending the programme?
- How were the facilitators' attitudes during the sessions?
- How did you feel about the other members of the group?
- Did the times and days work for you?
- How did you get to the location and how long did it take you?
- Did the programme organisers do anything to make it possible for you to attend the sessions?

- What do you think makes it difficult for some parents to come to the sessions?

- Some parents weren't able to come to the programme at all or stopped coming to the sessions. Did they tell you why? (If YES - What problems did they have?; If NO - What do you think was wrong?)
- *Sometimes people think twice before coming to parenting programmes. Sometimes other things are going on which they have to put off to attend. Even though you were able to attend most/all of the sessions, is there anything that we could have done to make it easier for you to attend? What would you have liked us to do?*

- **What was it like to be part of the research (e.g., the research assistants coming to your home to ask you questions and do the video)?**

Appendix M: Interview Schedule for Low Attenders

Department of Psychology, University of Cape Town

SINOVUYO POST-INTERVENTION INTERVIEW SCHEDULE

For parents that attended fewer than 5 SCFP sessions

- Thank you for signing the consent form, and agreeing to take part in the interview. You are giving a great deal of help to families in South Africa by doing this. Thank you very much!

- I am interested to know what you thought and felt about the Sinovuyo Caring Families Programme? There are no right or wrong answers – we are just interested in your experience.

(Open-ended question to get a sense of the parent's attitude towards the programme. It will also set the scene for the following questions that are specific to barriers to attendance.)

- Why did you want to attend the programme?

- Sometimes people aren't able to come to all of the sessions of the Sinovuyo Caring Families Programme. We would like to know why you and others weren't able to come to all of the sessions, and if there was something we could have done to help. We are really interested in your opinions.

- Could you tell us why you didn't come to all the sessions?

- What helped you to go the first time? (If they attended more than once) And what happened after that helped you get to other sessions? What happened that stopped you from getting to the other programme sessions?

EXAMPLES OF PROBING QUESTIONS:

- How do you feel about attending a parenting programme?
- How did your family feel about you attending the programme?

- How were the facilitators' attitudes during the sessions and home visits?
- How did you find the content of the programme sessions?
- How did you feel about the other members of the group?
- Did the times and days work for you? Do you have a job?
- Did you have problems with childcare?
- How did you get to the location and how long did it take you?
- Were you or someone else ill?
- Were there problems in your family? What sort of problems?
- Did the programme organisers do anything to make it possible for you to attend the sessions?

- **Could we have done anything to support you so that you came to more of the Sinovuyo programme?**

- **What was it like to be part of the research (e.g., the research assistants coming to your home to ask you questions and do the video)?**

Appendix N: Interview Schedule for non-enrolees

Department of Psychology, University of Cape Town

SINOVUYO POST-INTERVENTION INTERVIEW SCHEDULE

For parents that did not enrol in the SCFP

- Thank you for signing the consent form, and agreeing to take part in the interview. You are giving a great deal of help to families in South Africa by doing this. Thank you very much!

- I am interested to know what you thought and felt about the Sinovuyo Caring Families Project. There are no right or wrong answers – we are just interested to hear your opinions.

(Open-ended question to get a sense of the parent's attitude towards the research project and contact from the programme (through pre-programme home visit and contact from facilitators).)

- Sometimes people aren't able to come to the Sinovuyo Caring Families Programme. It would help us to know why you didn't come, and if there was anything we could have done to help.

- Please could you share with me why you didn't come to the programme?

- Can you remember what happened on the first day of the programme that stopped you from going? After you didn't attend this session, what stopped you from getting to the other programme sessions?

EXAMPLES OF PROBING QUESTIONS

- What do you think a parenting programme does? What is it about? Have you spoken to anyone who has been to a parenting programme?
- How does your family feel about you attending a parenting programme?
- What was your experience of the research assistants and facilitators that visited you in your home?

- How do you feel about sharing personal information in front of a group of other parents?
- Did the times and days for Sinovuyo work for you? Was the programme venue difficult to get to?
- Did you have problems with childcare?
- Were you or someone else ill?
- Were there problems in your family? What sort of problems?

- What makes it difficult for someone to attend the programme?

- **Could we have done anything to make it possible for you to come to the Sinovuyo Caring Families Programme? What would you have liked us to do?**

- **What was it like to be part of the research (e.g., the research assistants coming to your home to ask you questions and do the video)?**

Appendix O: Example of Home Practice Form

SESSION ONE

Your Name: _____

Child Name: _____

Please check the boxes if you completed your home practice on that day.

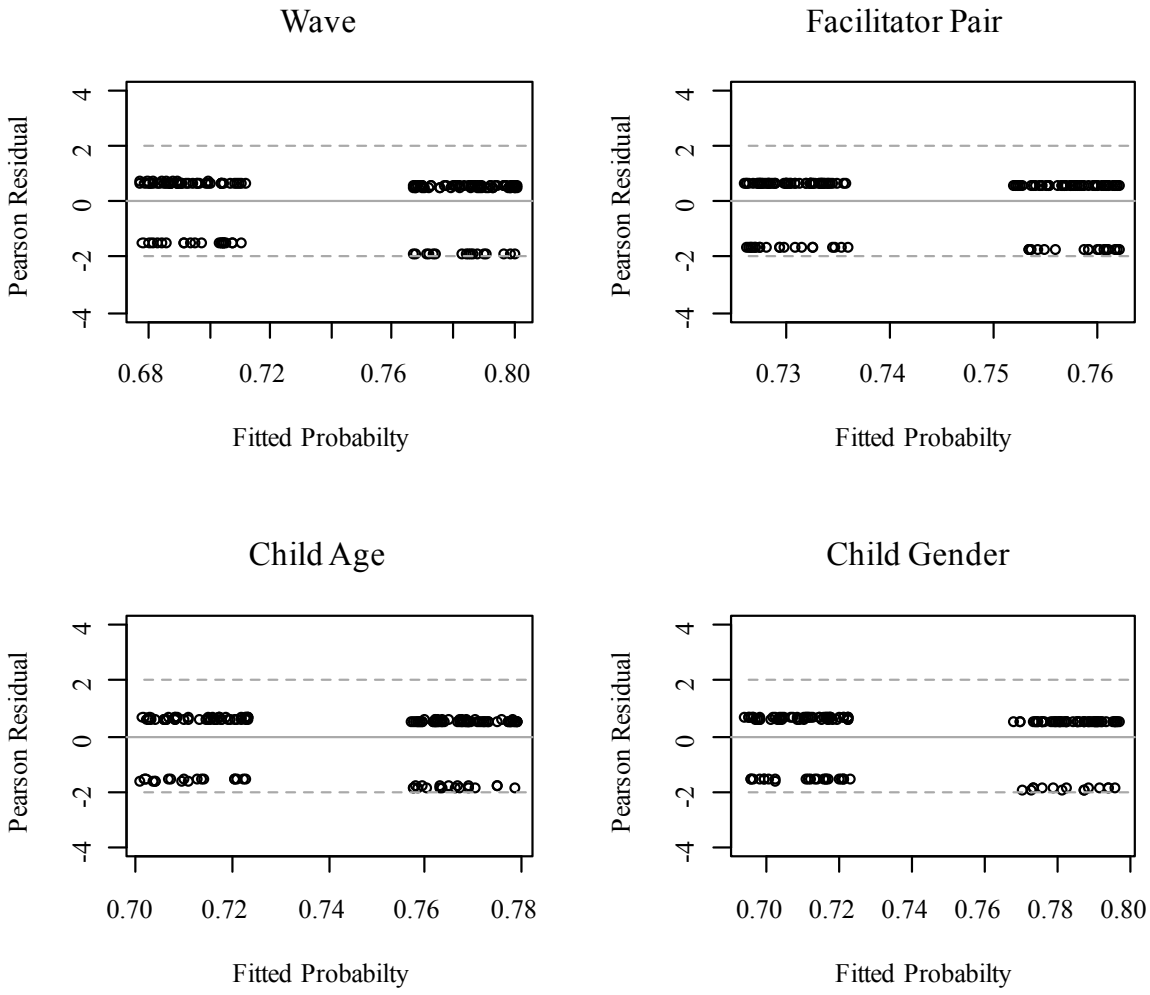
This will help you keep track on your progress during the week!

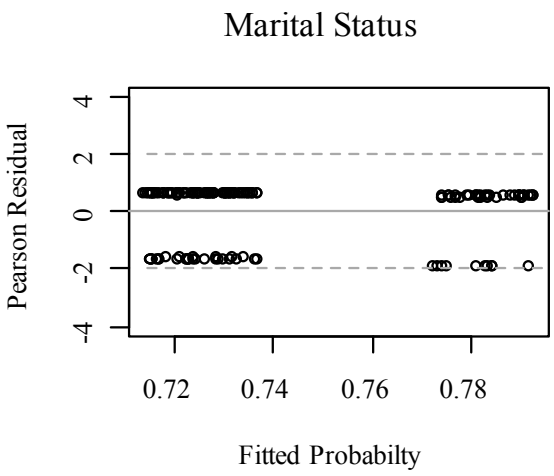
DID I…	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
Spend 5 minutes of Quality Time with my child							
Tell my child the Strange Animal story							
Do the physical exercise in the morning							

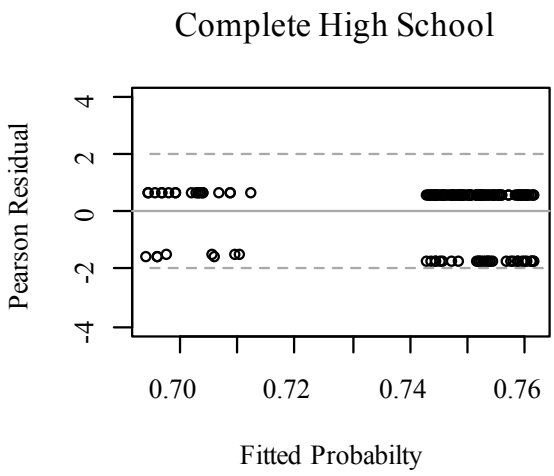
Appendix P: Diagnostic Plots for Enrolment Model

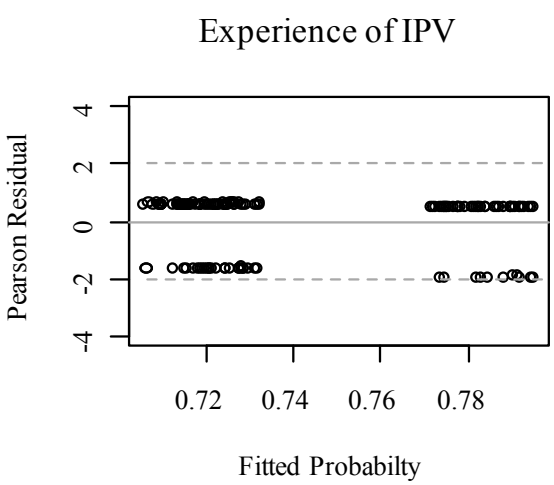
Standardised Pearson Residual Against Fitted Probabilities for Each Univariate Model

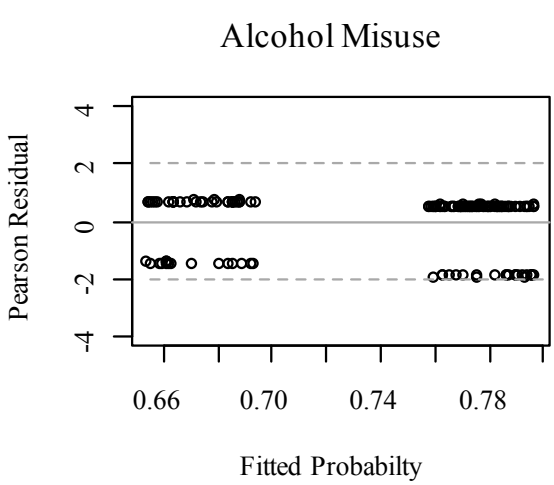
For plotting purposes, a small amount of noise has been added to fitted probabilities. Two distinct bands of residuals are seen as expected when modelling binary responses.




Marital Status
Pearson Residual
-4
-2
0
2
4
0.72
0.74
0.76
0.78
Fitted Probabilty


Complete High School
Pearson Residual
-4
-2
0
2
4
0.70
0.72
0.74
0.76
Fitted Probabilty

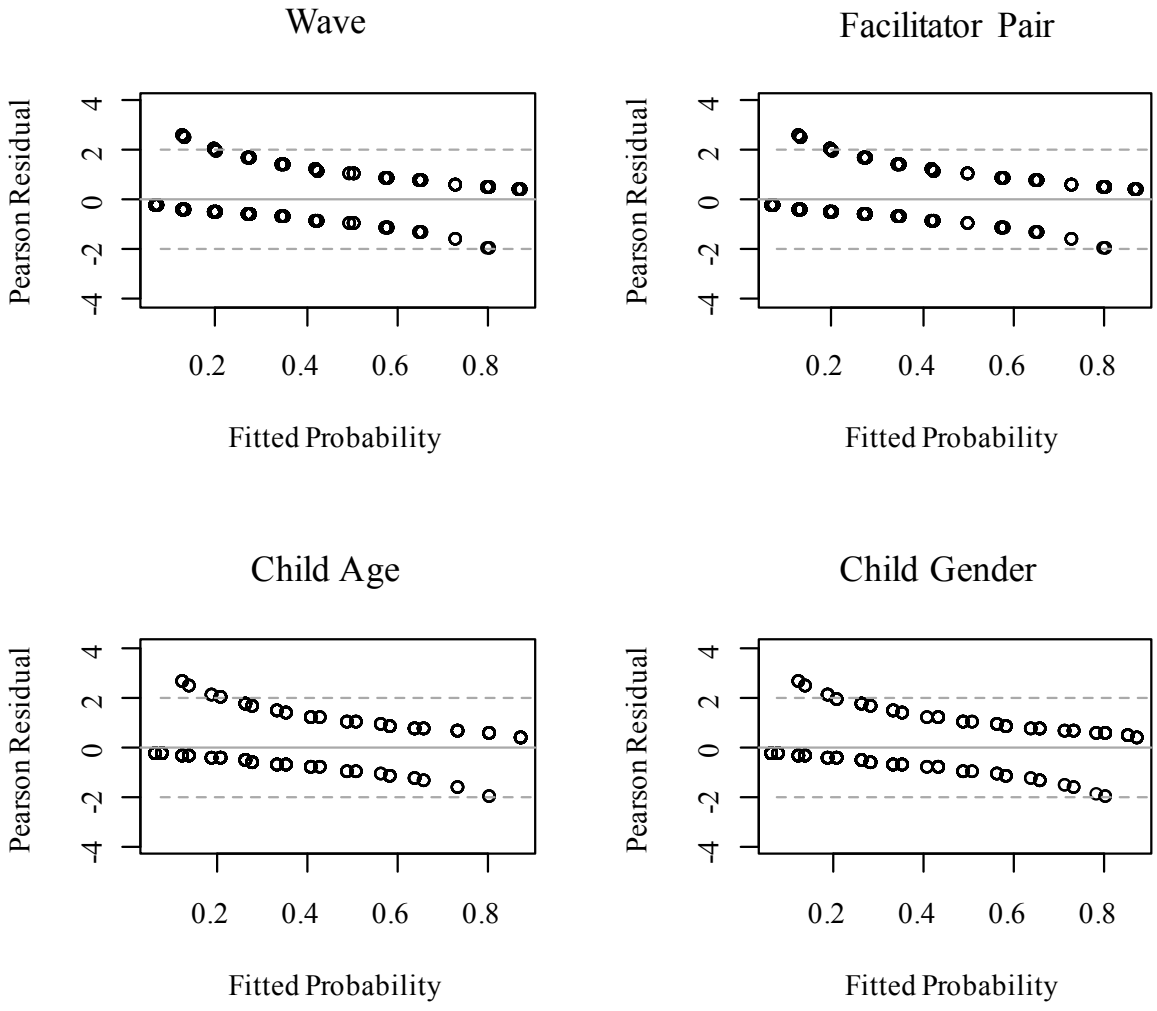

Experience of IPV
Pearson Residual
-4
-2
0
2
4
0.72
0.74
0.76
0.78
Fitted Probabilty

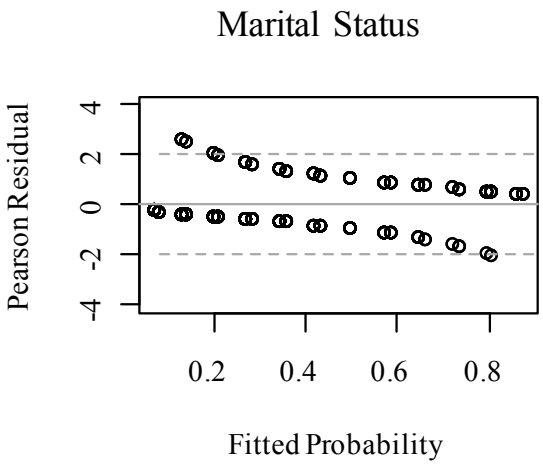

Alcohol Misuse
Pearson Residual
-4
-2
0
2
4
0.66
0.70
0.74
0.78
Fitted Probabilty

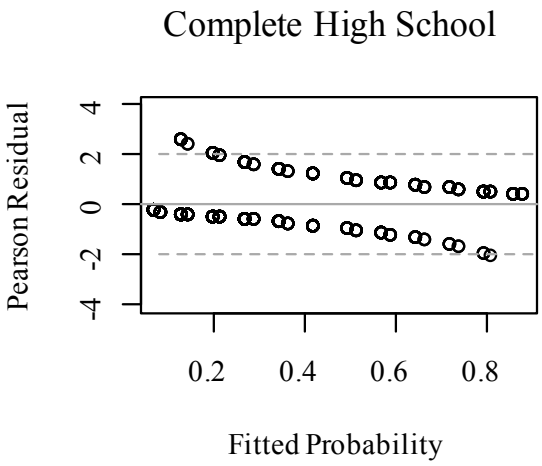
Appendix Q: Diagnostic Plots for Attendance Model

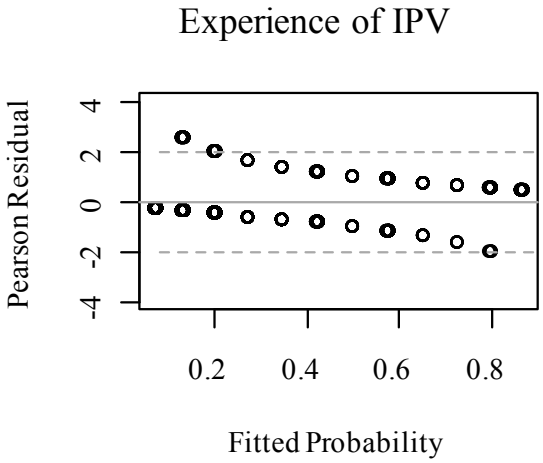
Standardised Pearson Residuals Against Fitted Probabilities for Each Univariate Model

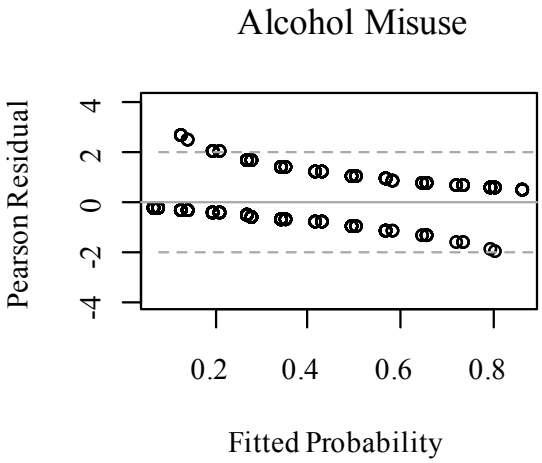
Two distinct bands of residuals are seen as expected when modelling binary responses. The random effects provide some variability.

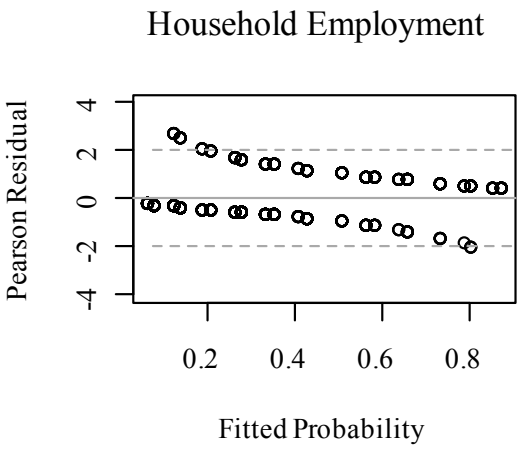


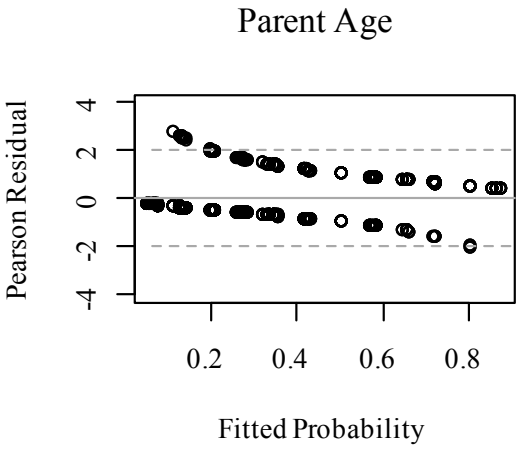

Marital Status
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
Fitted Probability

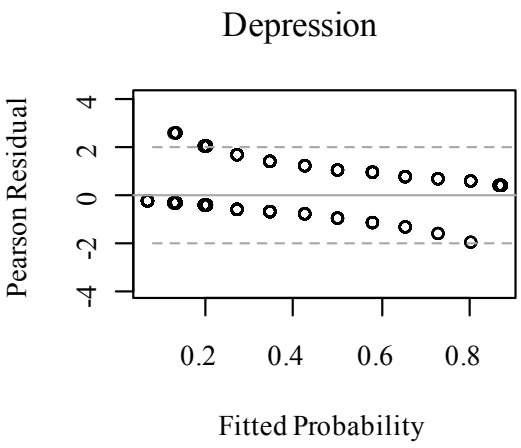

Complete High School
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
Fitted Probability

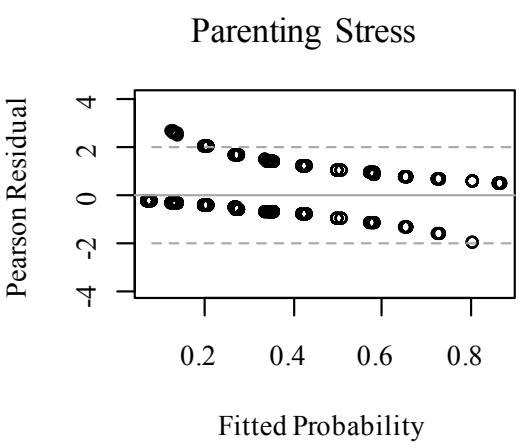

Experience of IPV
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
Fitted Probability

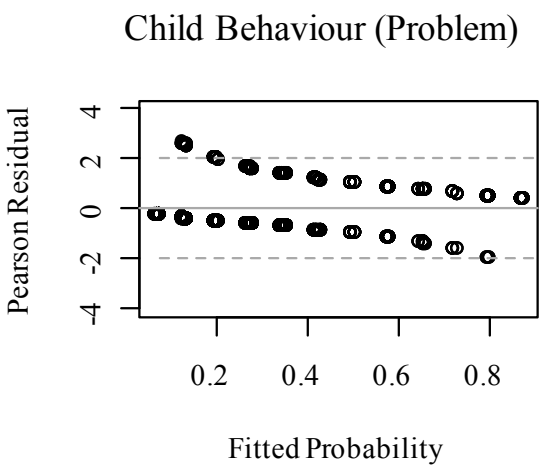

Alcohol Misuse
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
Fitted Probability

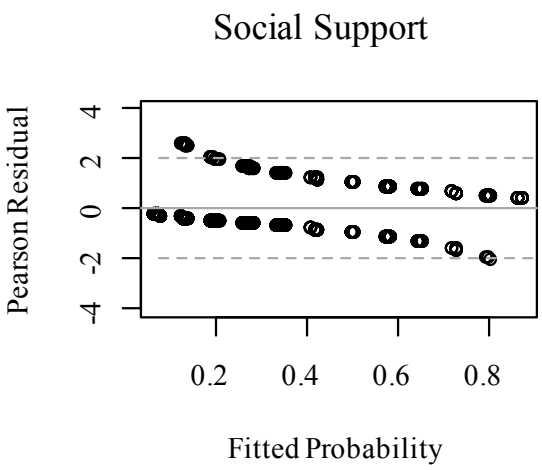

Household Employment
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
Fitted Probability

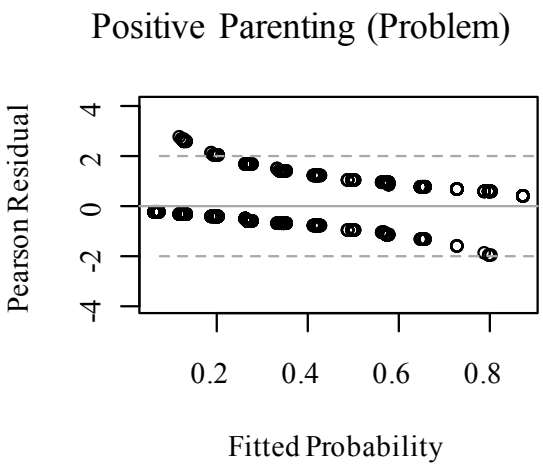

Parent Age
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
Fitted Probability

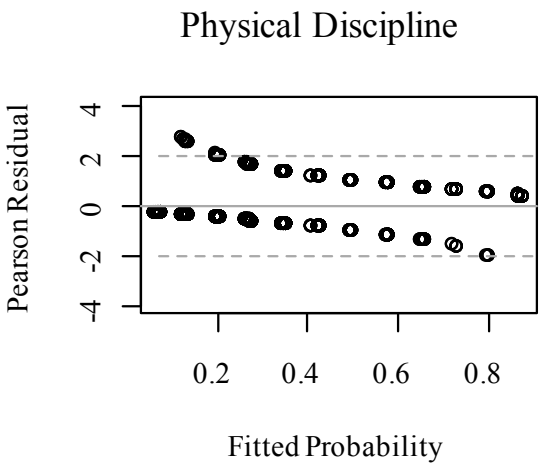

Depression
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
Fitted Probability


Parenting Stress
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
Fitted Probability

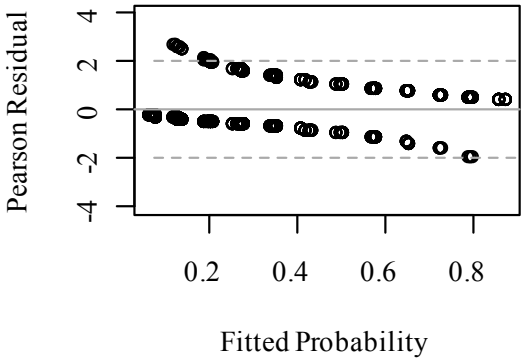

Child Behaviour (Problem)
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
Fitted Probability


Social Support
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
Fitted Probability

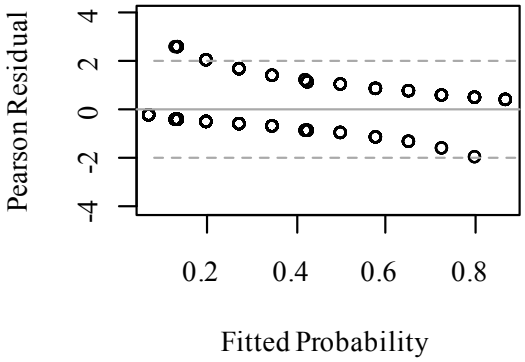

Positive Parenting (Problem)
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
Fitted Probability


Physical Discipline
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
Fitted Probability

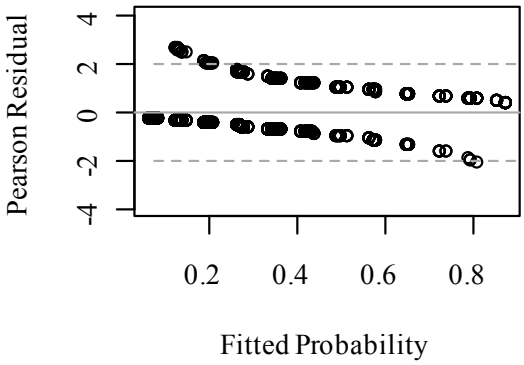
Psychological Discipline



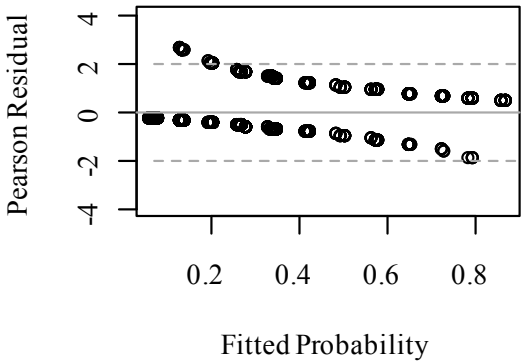
Non-violent Discipline



Household Hunger Level

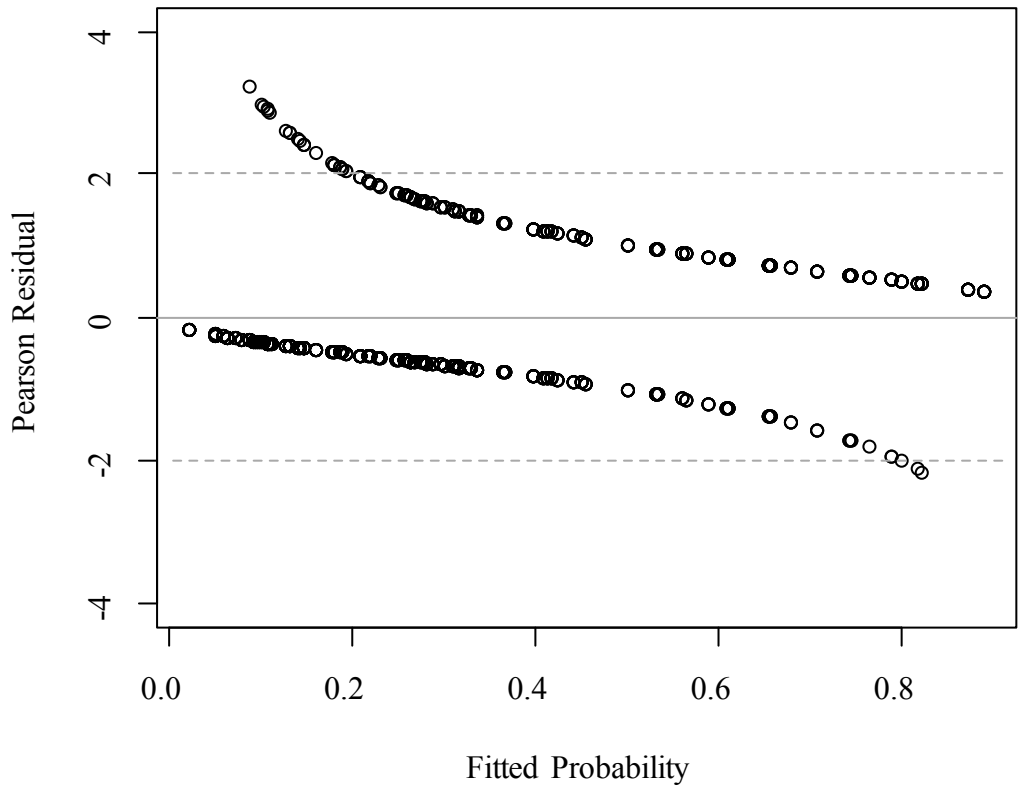


No. of Health Conditions



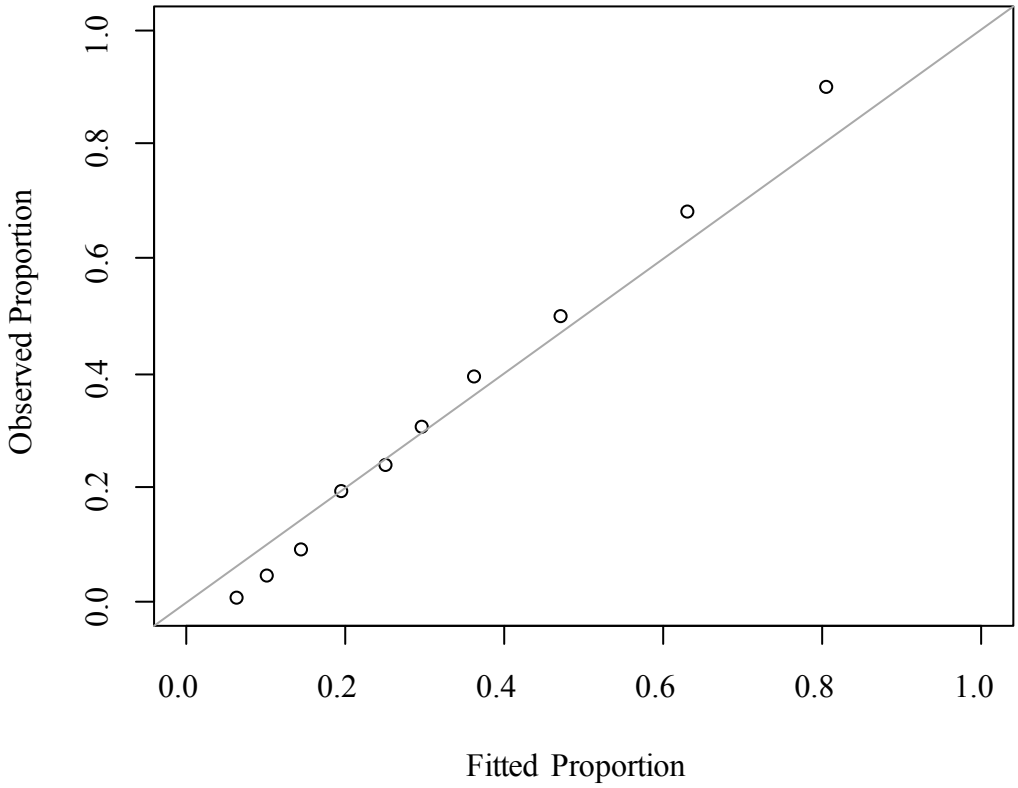
Standardised Pearson Residuals Against Fitted Probabilities for the Multivariable Regression Model

Two distinct bands of residuals are seen as expected when modelling binary responses.



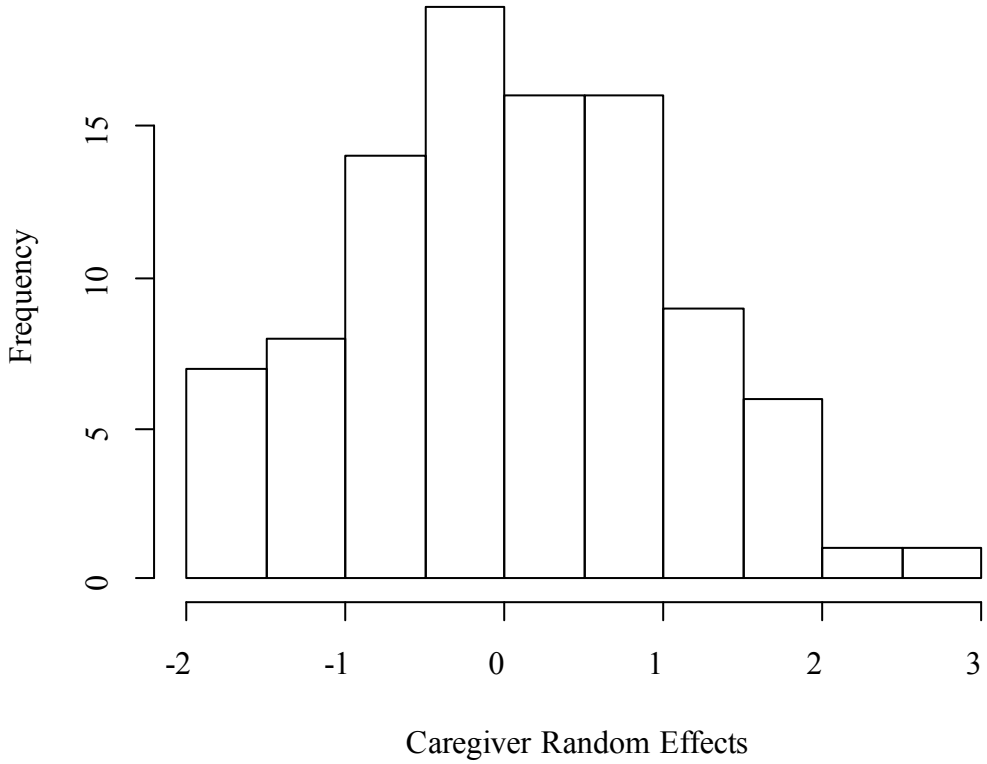
Observed Proportions of Participants who Enrol Versus Model Fitted Expected Proportions

Participants were divided into ten distinct groups based on the model fitted or expected probability of missing a session. Within each group, the observed proportion of participants who missed a session is compared to the average expected proportion below. Observed and expected proportions follow each other closely.



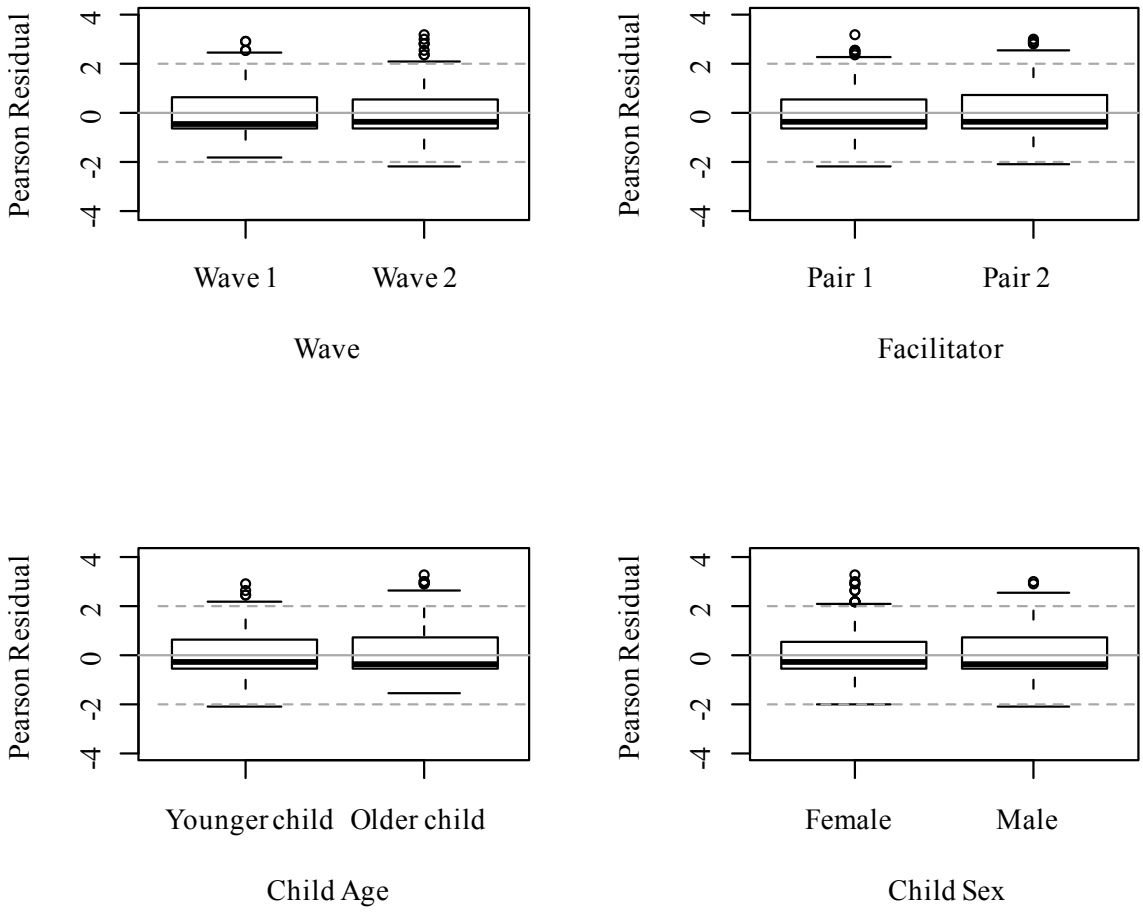
Distribution of Random Effects for Caregivers in the Sample

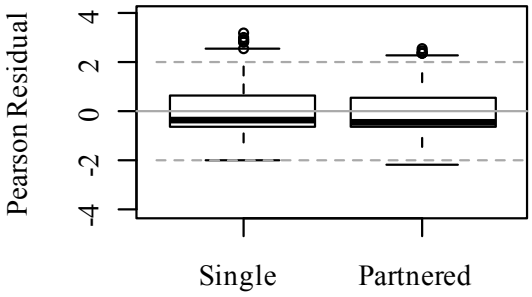
The distribution appears to deviate somewhat from normality. The group random effects were estimated to have zero variability and, therefore, are not shown.

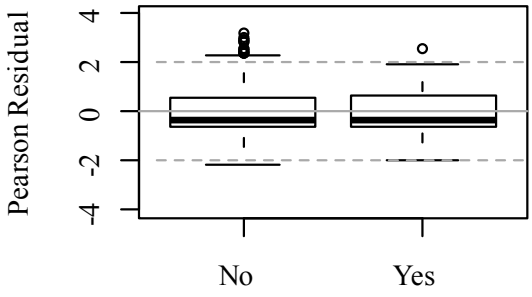


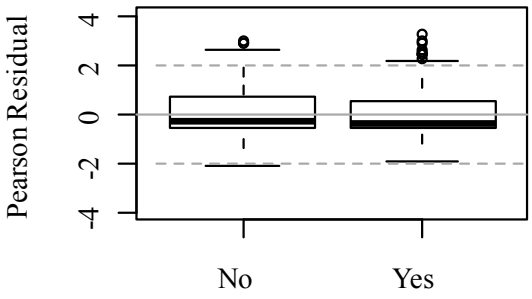
Standardised Pearson Residual Against Individual Predictors for the Multivariable Model

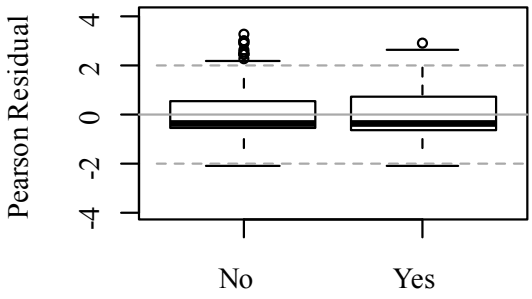
Model fit appears to be reasonable. For the continuous predictors, the assumption of linearity is not violated. To ease convergence of the model-fitting algorithms, continuous predictors were standardised. These standardised predictors are shown in the plots.

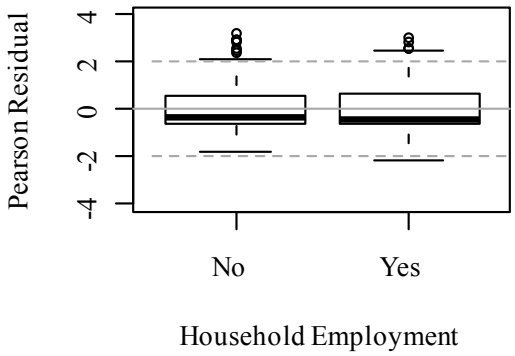


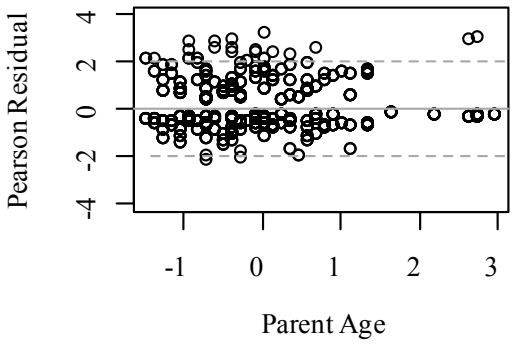

Pearson Residual
4
2
0
-2
-4
Single
Partnered
Marital Status

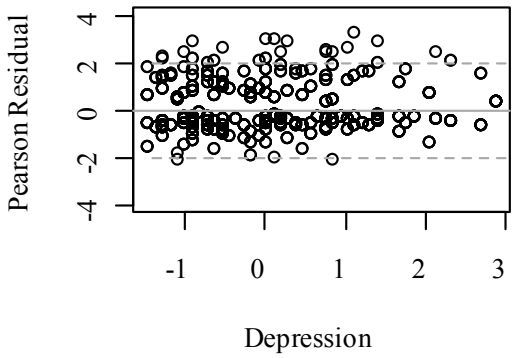

Pearson Residual
4
2
0
-2
-4
No
Yes
Completed High School

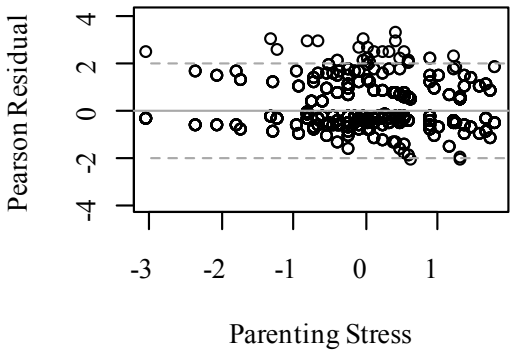

Pearson Residual
4
2
0
-2
-4
No
Yes
Experience of IPV

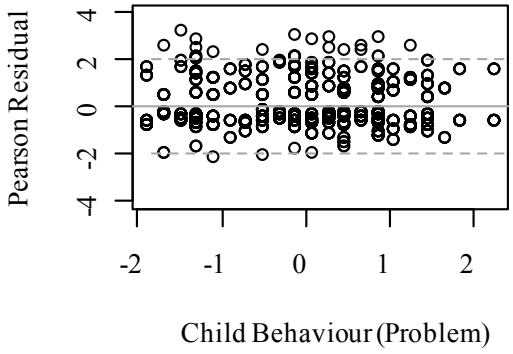

Pearson Residual
4
2
0
-2
-4
No
Yes
Alcohol Misuse

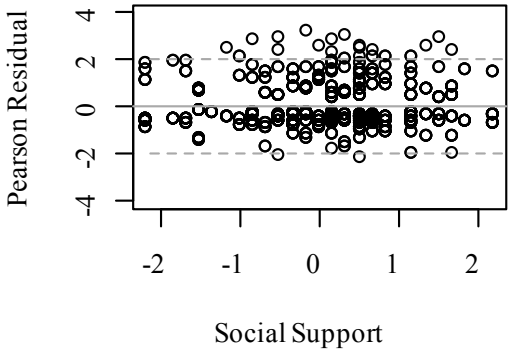

Pearson Residual
-4
-2
0
2
4
No
Yes
Household Employment

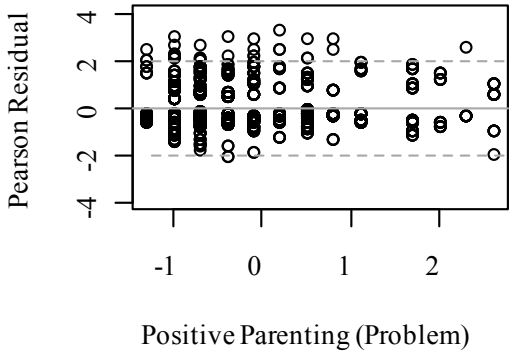

Pearson Residual
-4
-2
0
2
4
-1
0
1
2
3
Parent Age

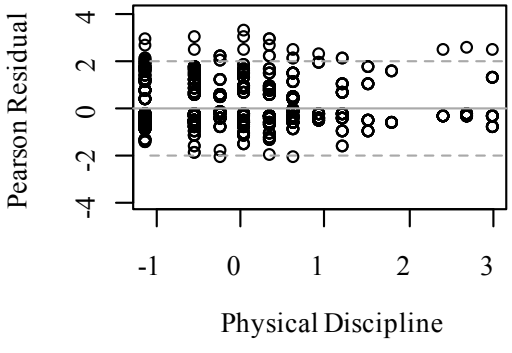

Pearson Residual
-4
-2
0
2
4
-1
0
1
2
3
Depression

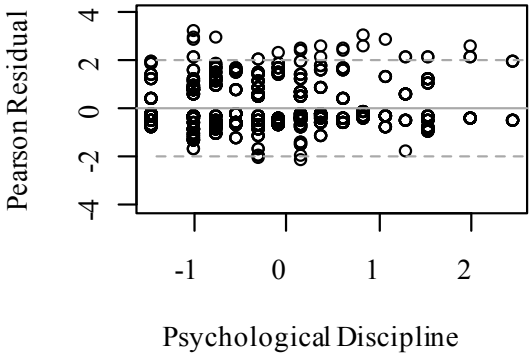

Pearson Residual
-4
-2
0
2
4
-3
-2
-1
0
1
Parenting Stress

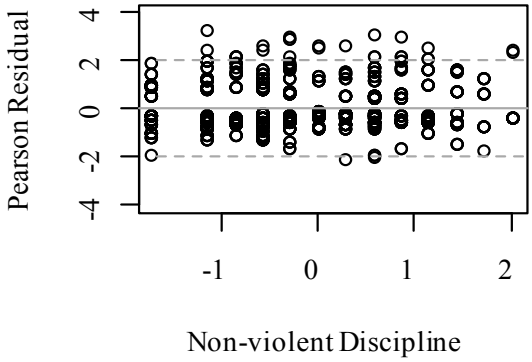

Pearson Residual
-4
-2
0
2
4
-2
-1
0
1
2
Child Behaviour (Problem)


Pearson Residual
-4
-2
0
2
4
-2
-1
0
1
2
Social Support

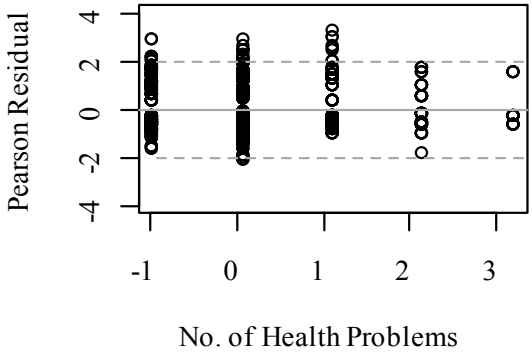

Pearson Residual
-4
-2
0
2
4
-1
0
1
2
Positive Parenting (Problem)


Pearson Residual
-4
-2
0
2
4
-1
0
1
2
3
Physical Discipline

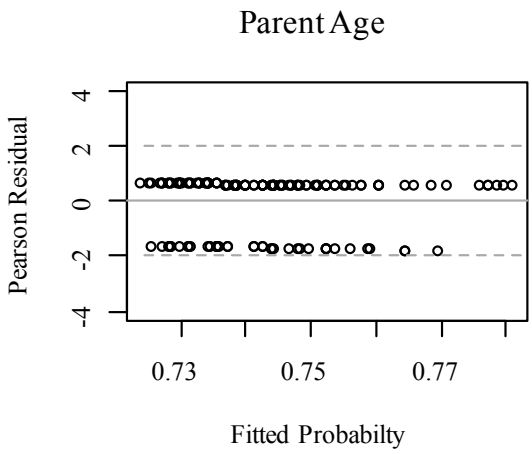

Pearson Residual
-4
-2
0
2
4
-1
0
1
2
Psychological Discipline

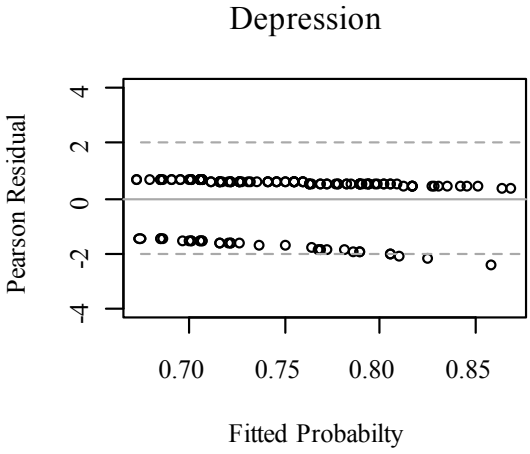

Pearson Residual
-4
-2
0
2
4
-1
0
1
2
Non-violent Discipline

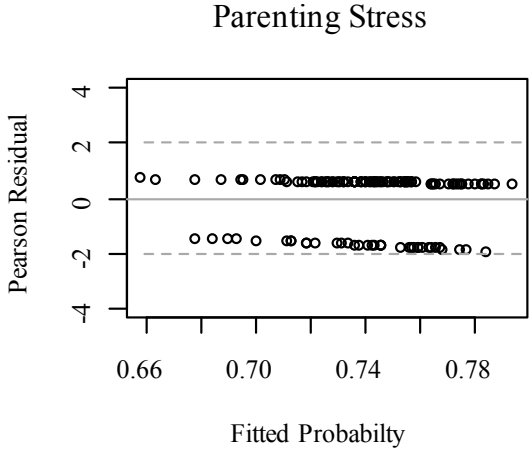

Pearson Residual
-4
-2
0
2
4
-2.0
-1.0
0.0
0.5
1.0
1.5
Household Hunger Level

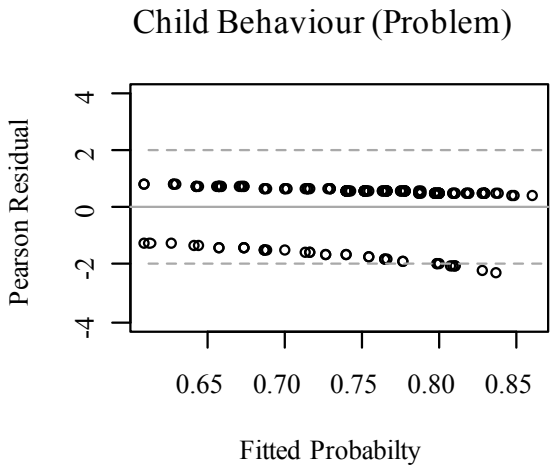

Pearson Residual
-4
-2
0
2
4
-1
0
1
2
3
No. of Health Problems

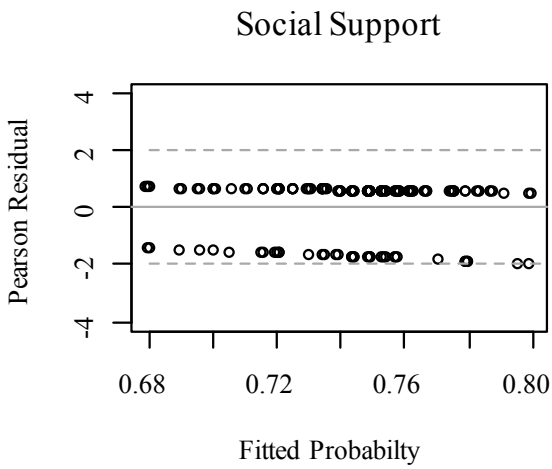

Household Employment
Pearson Residual
-4
-2
0
2
4
0.740
0.745
0.750
Fitted Probabilty

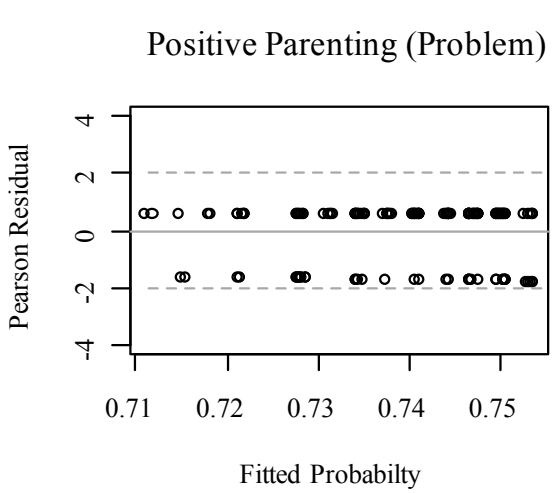

Parent Age
Pearson Residual
-4
-2
0
2
4
0.73
0.75
0.77
Fitted Probabilty

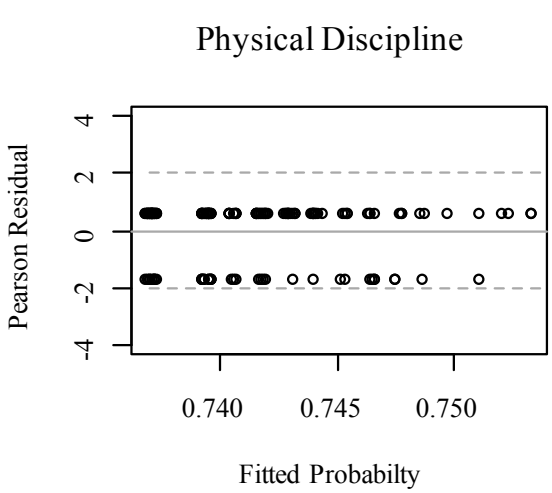

Depression
Pearson Residual
-4
-2
0
2
4
0.70
0.75
0.80
0.85
Fitted Probabilty


Parenting Stress
Pearson Residual
-4
-2
0
2
4
0.66
0.70
0.74
0.78
Fitted Probabilty

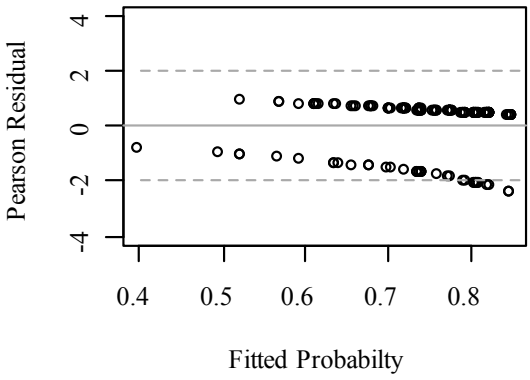

Child Behaviour (Problem)
Pearson Residual
4
2
0
-2
-4
0.65
0.70
0.75
0.80
0.85
Fitted Probabilty


Social Support
Pearson Residual
4
2
0
-2
-4
0.68
0.72
0.76
0.80
Fitted Probabilty

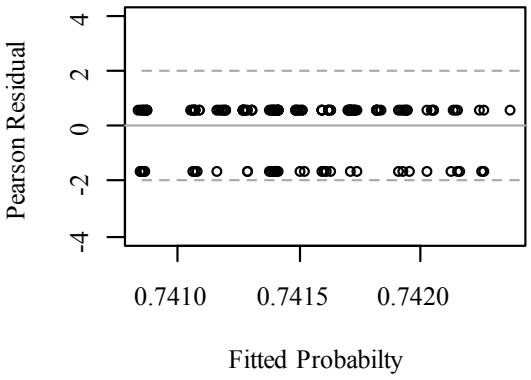

Positive Parenting (Problem)
Pearson Residual
4
2
0
-2
-4
0.71
0.72
0.73
0.74
0.75
Fitted Probabilty


Physical Discipline
Pearson Residual
4
2
0
-2
-4
0.740
0.745
0.750
Fitted Probabilty

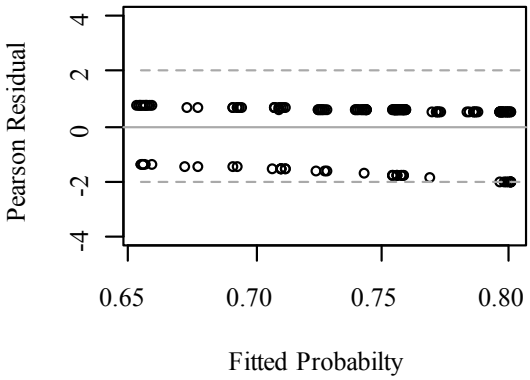
Psychological Discipline



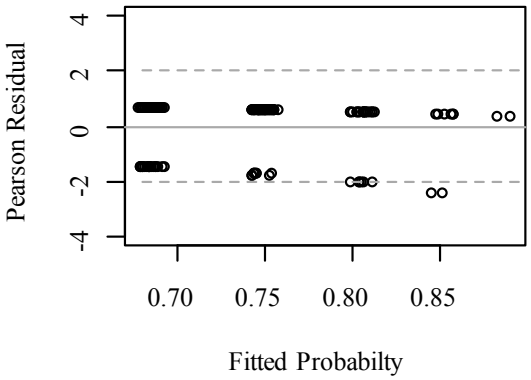
Non-violent Discipline



Household Hunger Score

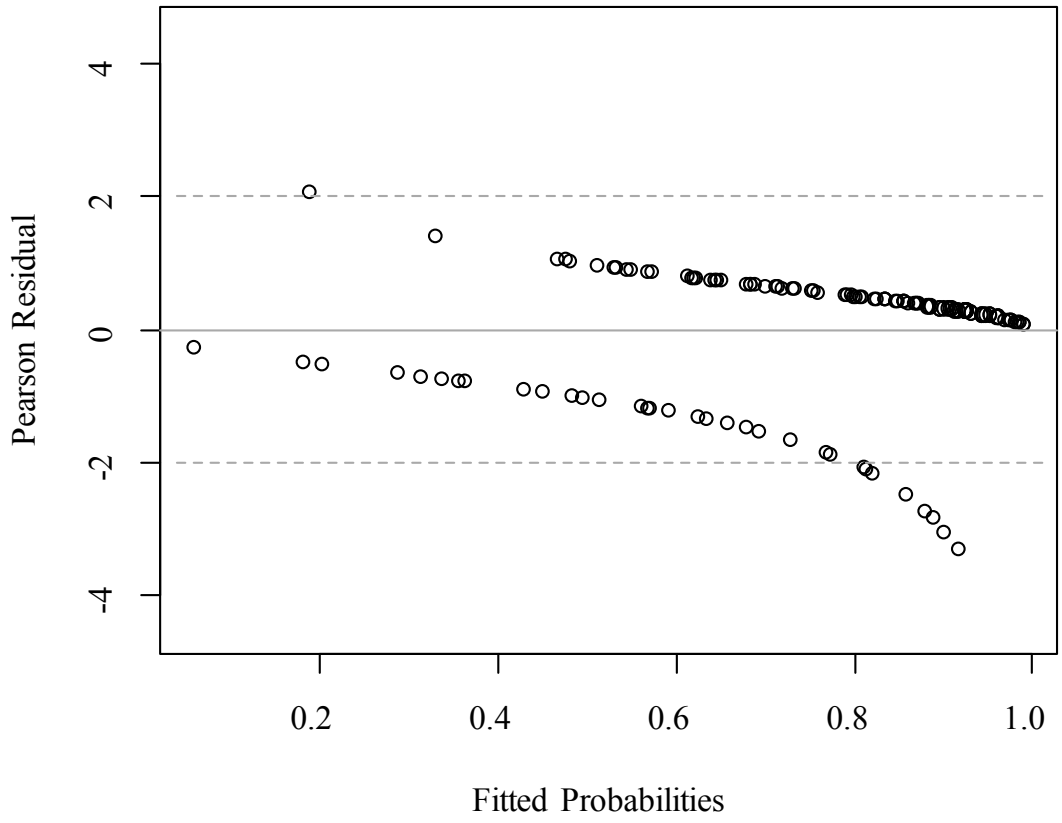


No. of Health Conditions



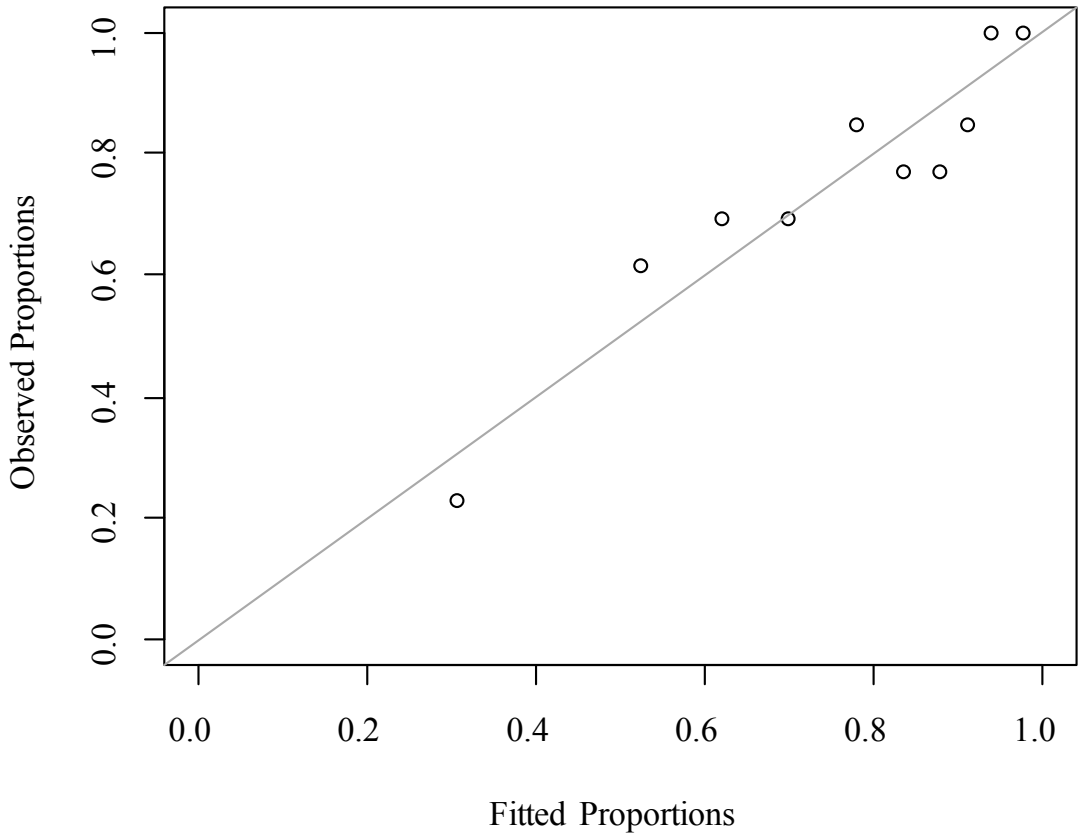
Standardised Pearson Residual Against Fitted Probabilities for the Multivariable Regression Model

Two distinct bands of residuals are seen – again, this is expected when modelling binary responses.



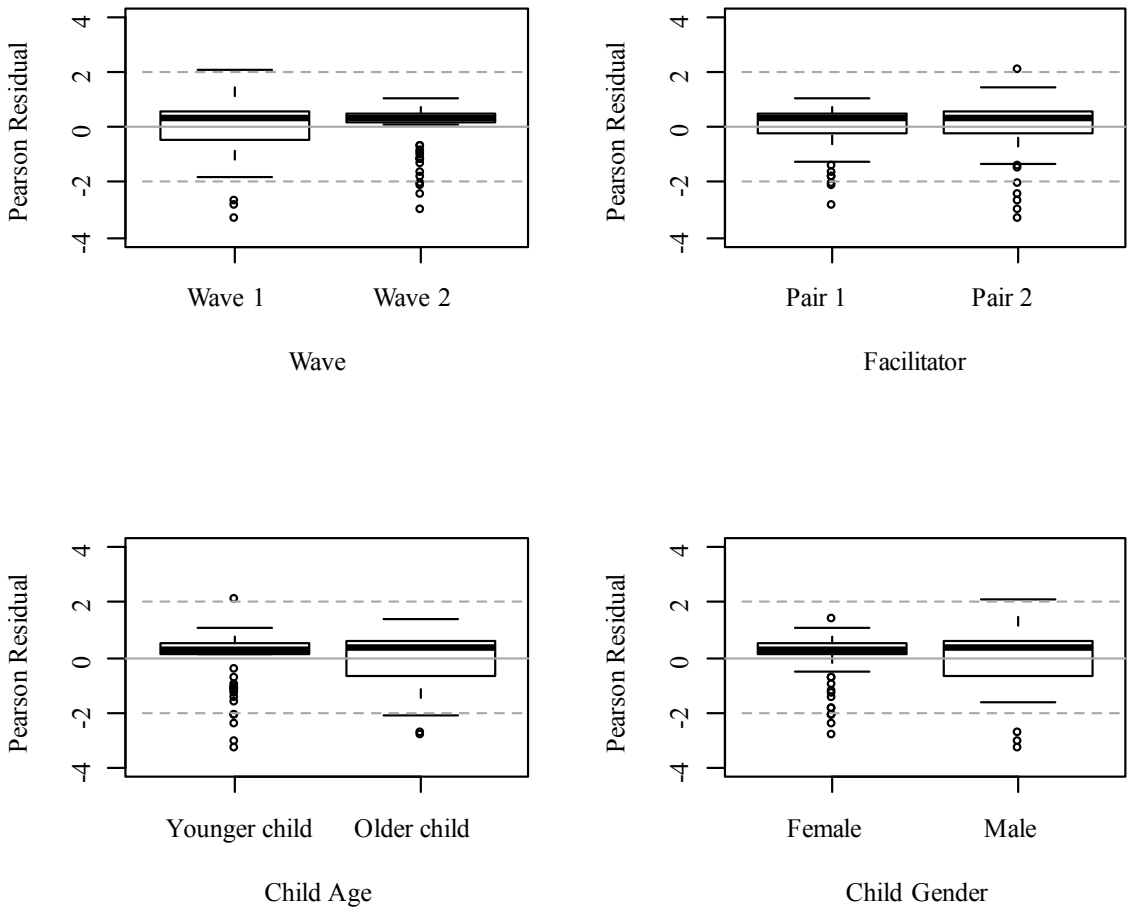
Observed Proportions of Participants who Enrol Versus Model Fitted Expected Proportions

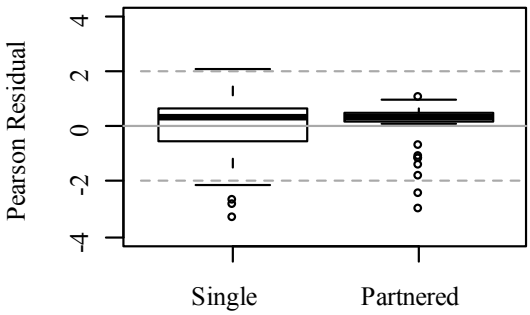
Participants were divided into ten distinct groups based on the model fitted or expected probability of enrolling. Within each group, the observed proportion of participants who enrolled is compared to the average expected proportion below. Observed and expected proportions follow each other closely.

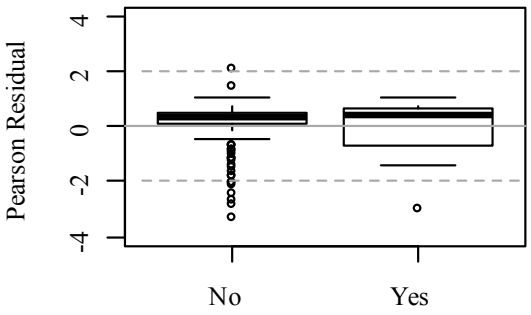


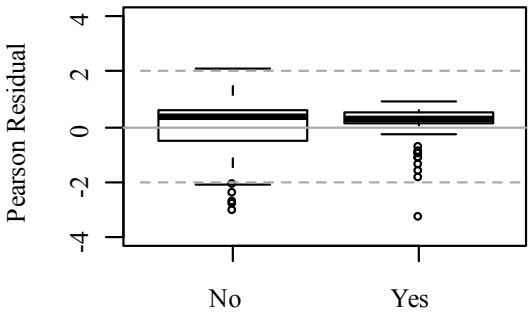
Standardised Pearson Residual Against Individual Predictors for the Multivariable Model

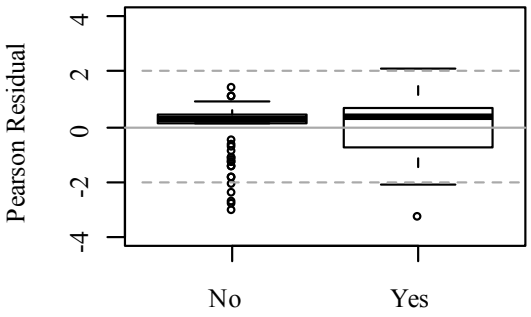
Model fit appears to be reasonable. For the continuous predictors, the assumption of linearity is not violated.



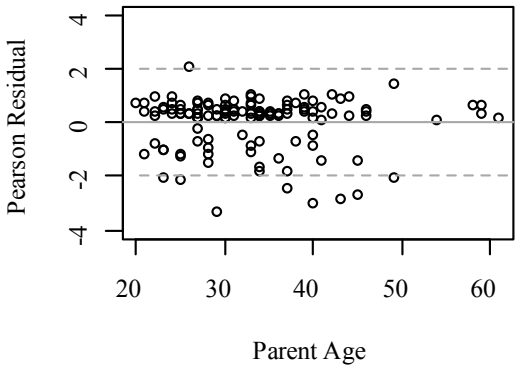

Pearson Residual
4
2
0
-2
-4
Single
Partnered
Marital Status

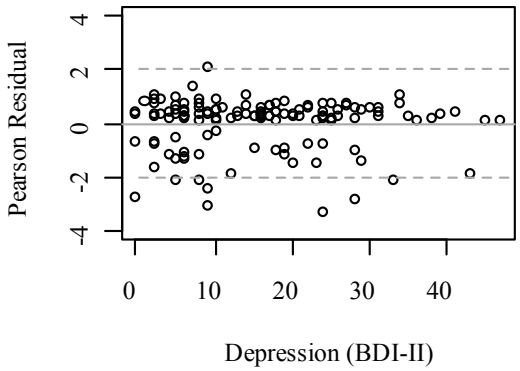

Pearson Residual
4
2
0
-2
-4
No
Yes
Complete High School

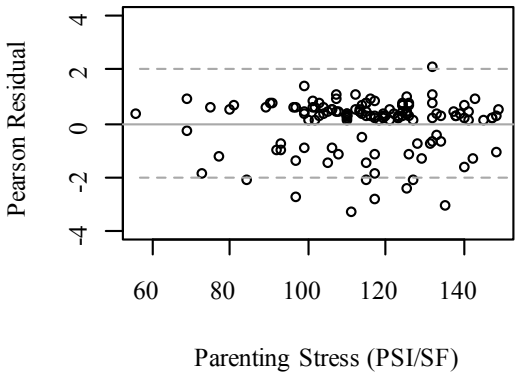

Pearson Residual
4
2
0
-2
-4
No
Yes
Experience of IPV

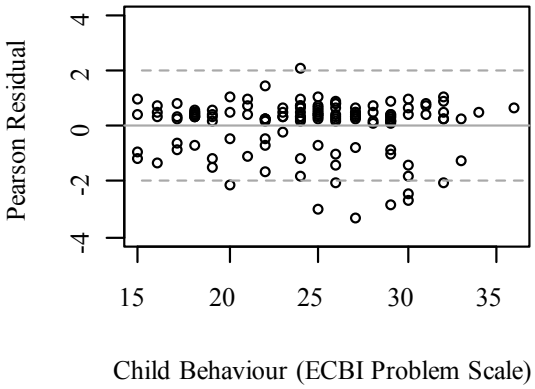

Pearson Residual
4
2
0
-2
-4
No
Yes
Alcohol Misuse

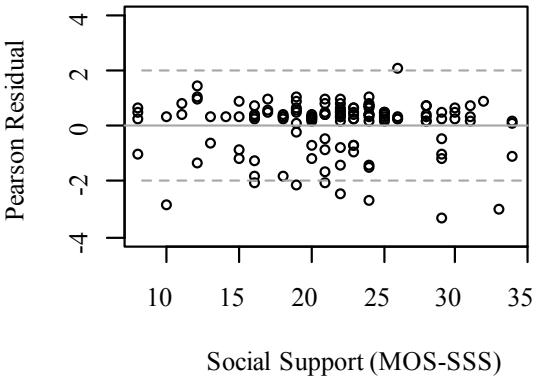

Pearson Residual
-4
-2
0
2
4
No
Yes
Household Employment

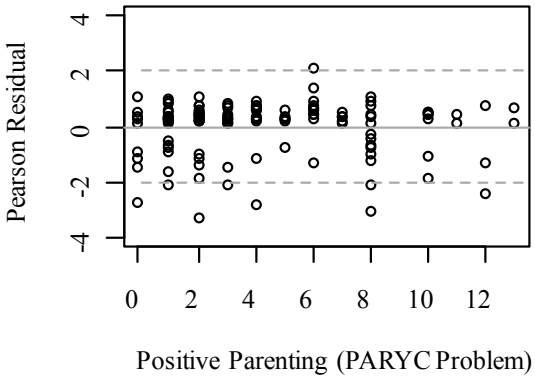

Pearson Residual
-4
-2
0
2
4
20
30
40
50
60
Parent Age

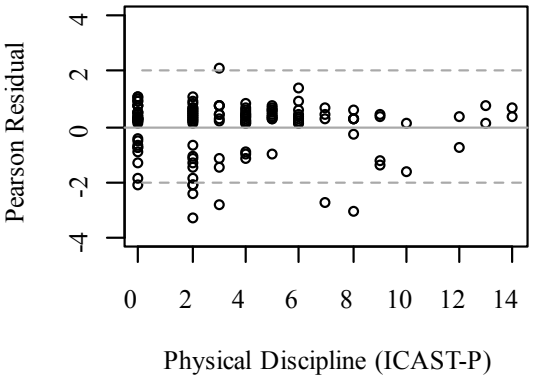

Pearson Residual
-4
-2
0
2
4
0
10
20
30
40
Depression (BDI-II)

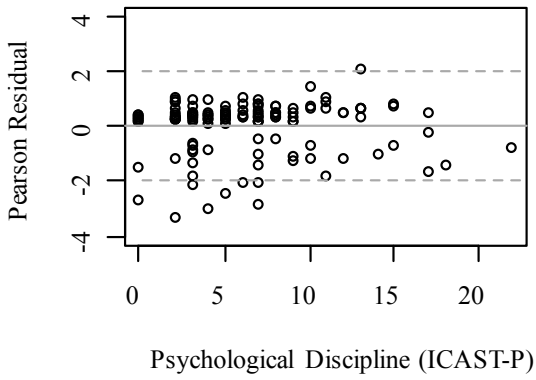

Pearson Residual
-4
-2
0
2
4
60
80
100
120
140
Parenting Stress (PSI/SF)

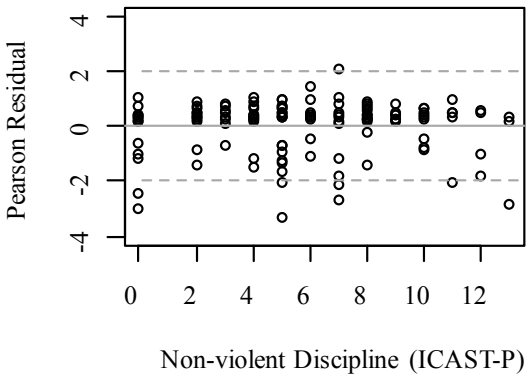

Pearson Residual
-4
-2
0
2
4
15
20
25
30
35
Child Behaviour (ECBI Problem Scale)


Pearson Residual
-4
-2
0
2
4
10
15
20
25
30
35
Social Support (MOS-SSS)

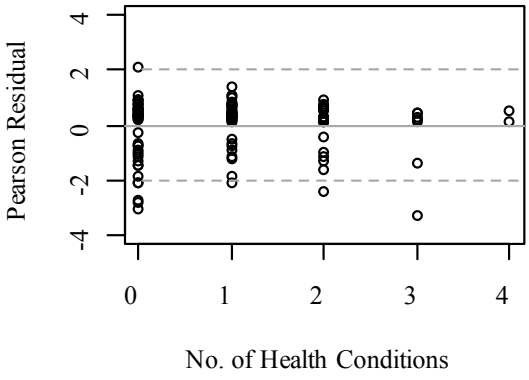

Pearson Residual
-4
-2
0
2
4
0
2
4
6
8
10
12
Positive Parenting (PARYC Problem)


Pearson Residual
-4
-2
0
2
4
0
2
4
6
8
10
12
14
Physical Discipline (ICAST-P)


Pearson Residual
-4
-2
0
2
4
0
5
10
15
20
Psychological Discipline (ICAST-P)


Pearson Residual
-4
-2
0
2
4
0
2
4
6
8
10
12
Non-violent Discipline (ICAST-P)


Pearson Residual
-4
-2
0
2
4
0
2
4
6
8
Household Hunger Score

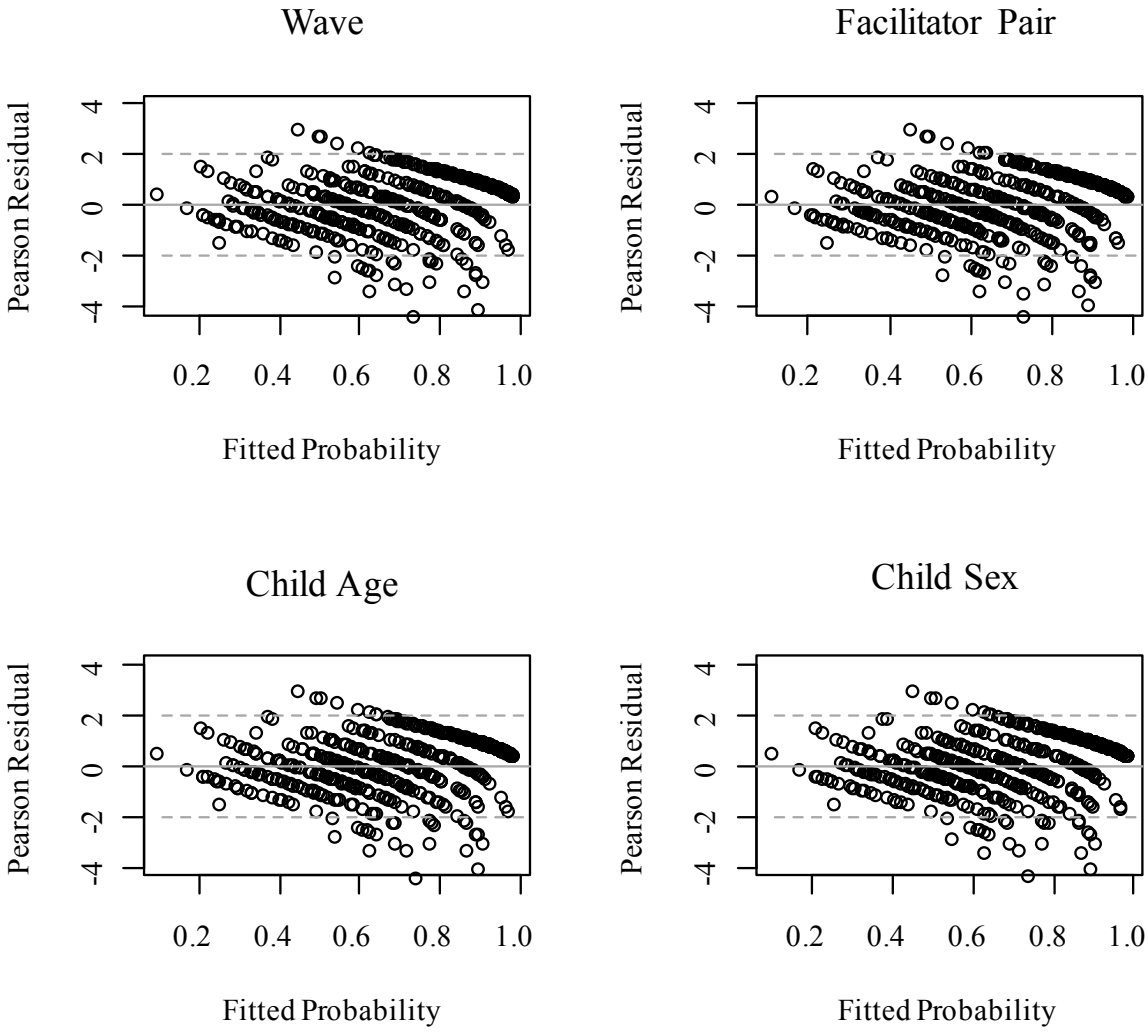

Pearson Residual
-4
-2
0
2
4
0
1
2
3
4
No. of Health Conditions

Appendix R: Diagnostic Plots for Home Practice Model

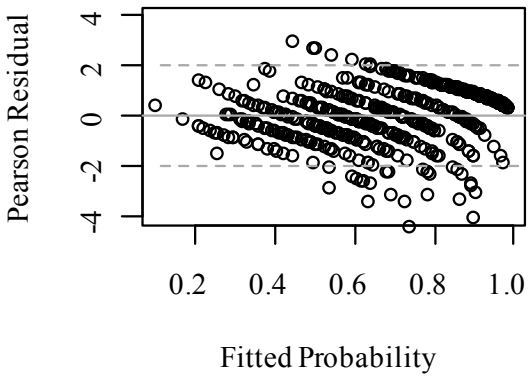
For the enrolment and attendance models, the data was set up such that there was a binary outcome for each observation. When studying home practice, the data was arranged in a way that each observation represented a distinct combination of participant and session, and the outcome was a count of the number of days on which home practice tasks were completed. While this has no statistical implications, the diagnostic plots that follow are somewhat different to the other models in terms of format.

Standardised Pearson Residual Against Fitted Probabilities for Each Univariate Model

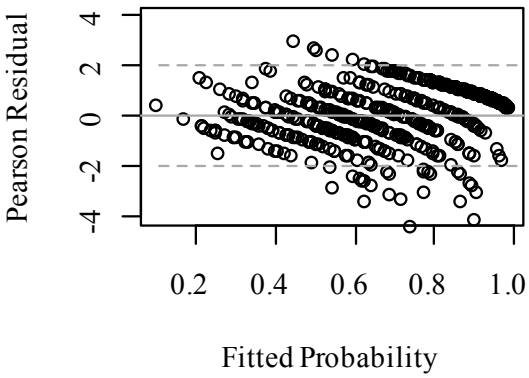
Six distinct bands of residuals, corresponding to the six possible observed counts, are seen in the plots below. The random effects provide some variability to the fitted proportion of days on which participants completed home practice.



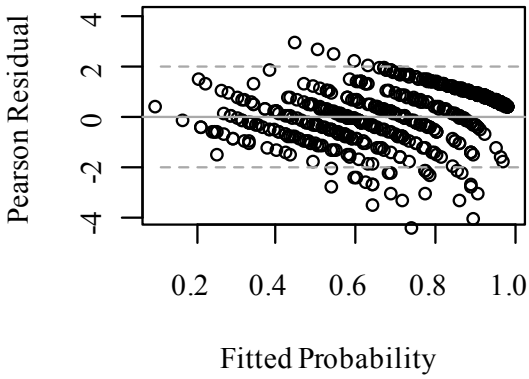
Marital Status



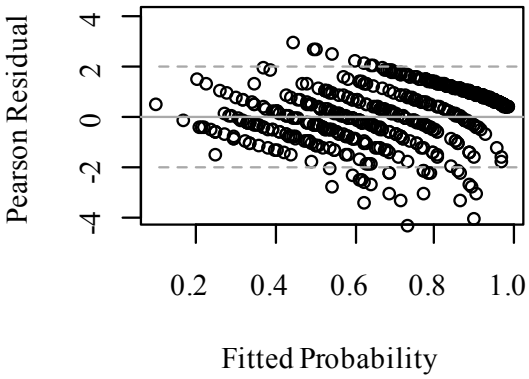
Completed High School

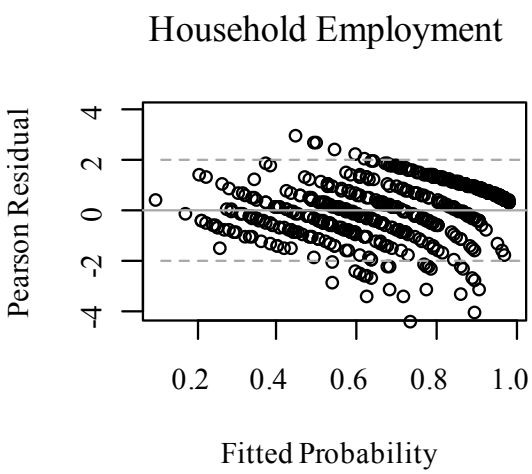


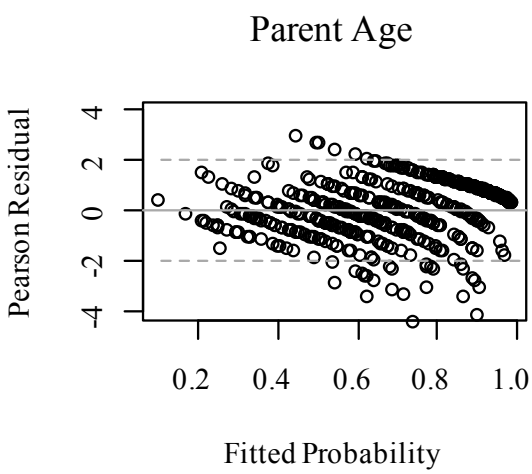
Experience of IPV

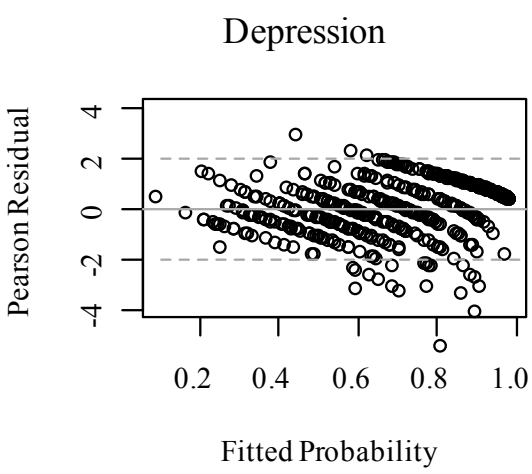


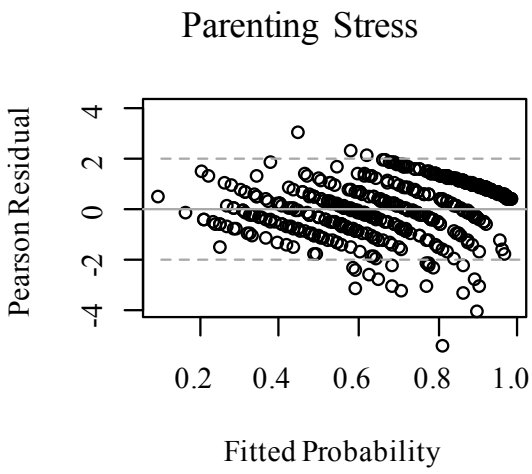
Alcohol Misuse

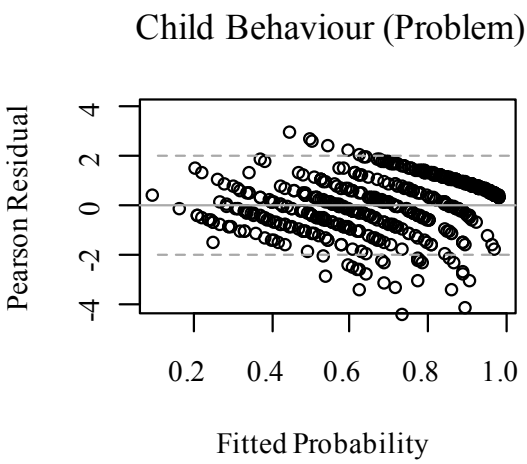


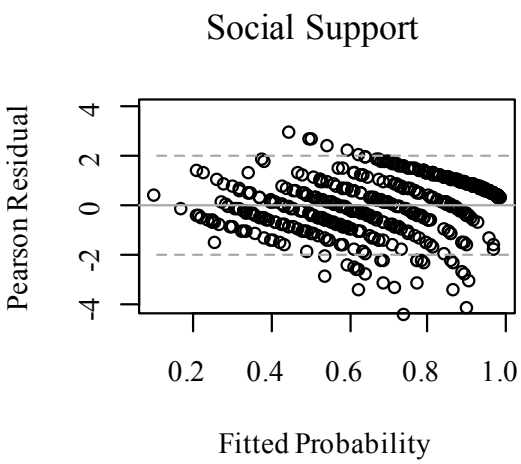

Household Employment
Pearson Residual
-4 -2 0 2 4
0.2 0.4 0.6 0.8 1.0
Fitted Probability

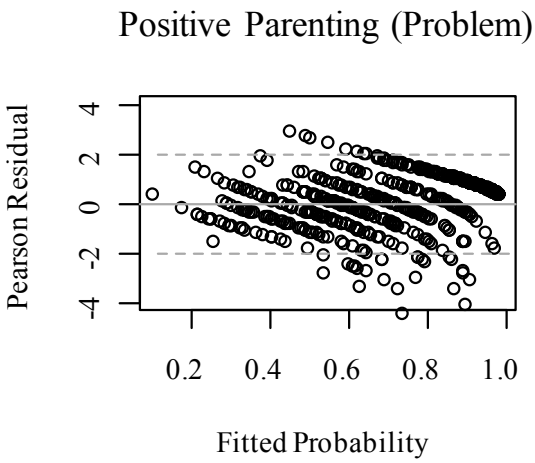

Parent Age
Pearson Residual
-4 -2 0 2 4
0.2 0.4 0.6 0.8 1.0
Fitted Probability

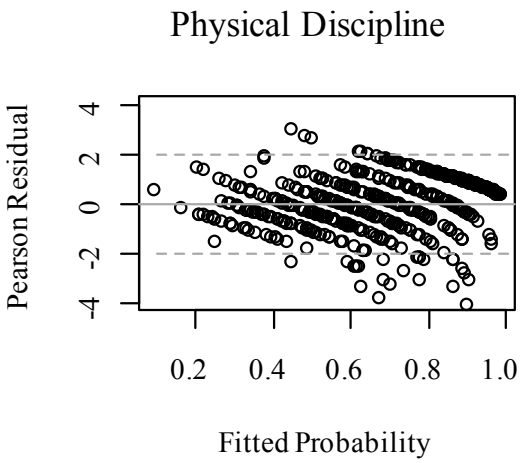

Depression
Pearson Residual
-4 -2 0 2 4
0.2 0.4 0.6 0.8 1.0
Fitted Probability

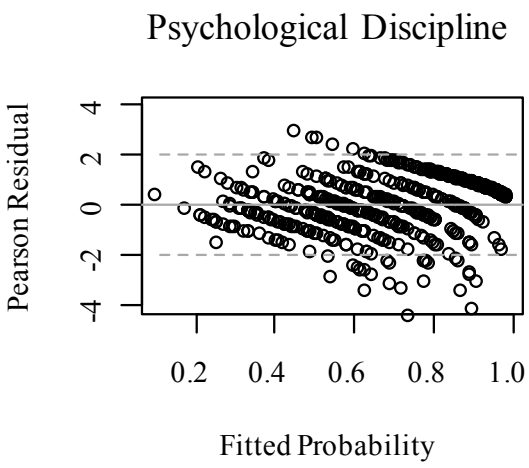

Parenting Stress
Pearson Residual
-4 -2 0 2 4
0.2 0.4 0.6 0.8 1.0
Fitted Probability

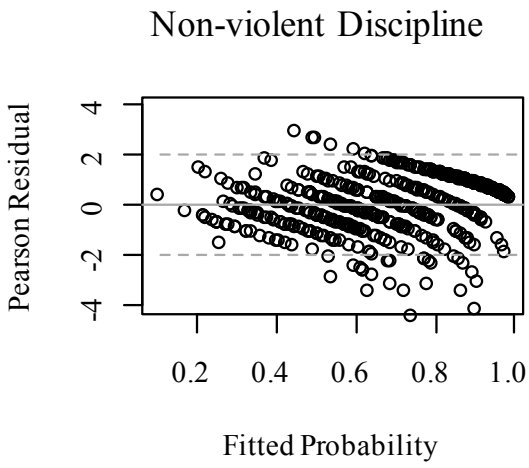

Child Behaviour (Problem)
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
1.0
Fitted Probability

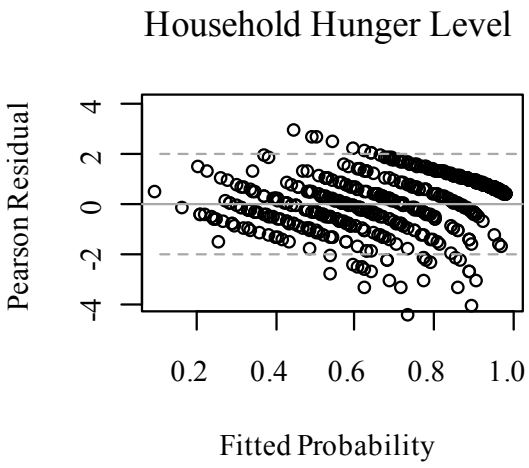

Social Support
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
1.0
Fitted Probability

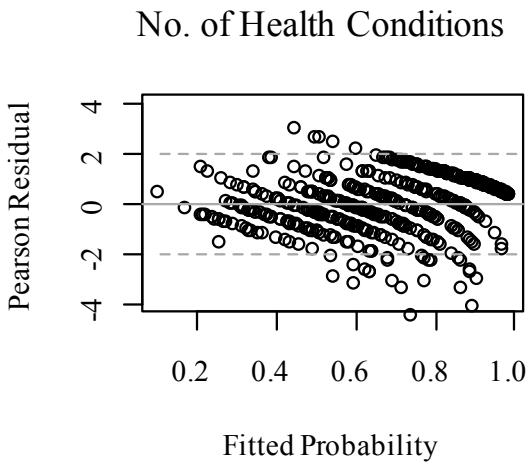

Positive Parenting (Problem)
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
1.0
Fitted Probability


Physical Discipline
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
1.0
Fitted Probability


Psychological Discipline
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
1.0
Fitted Probability

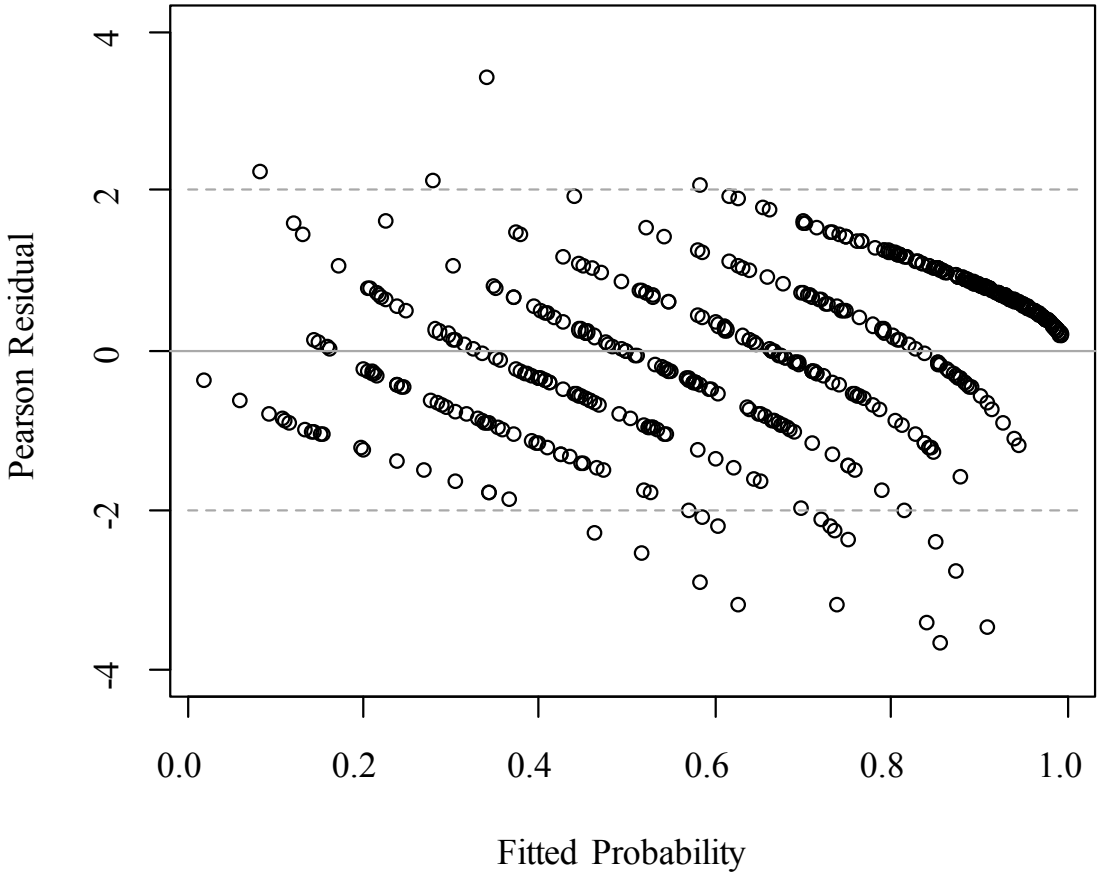

Non-violent Discipline
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
1.0
Fitted Probability


Household Hunger Level
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
1.0
Fitted Probability


No. of Health Conditions
Pearson Residual
-4
-2
0
2
4
0.2
0.4
0.6
0.8
1.0
Fitted Probability

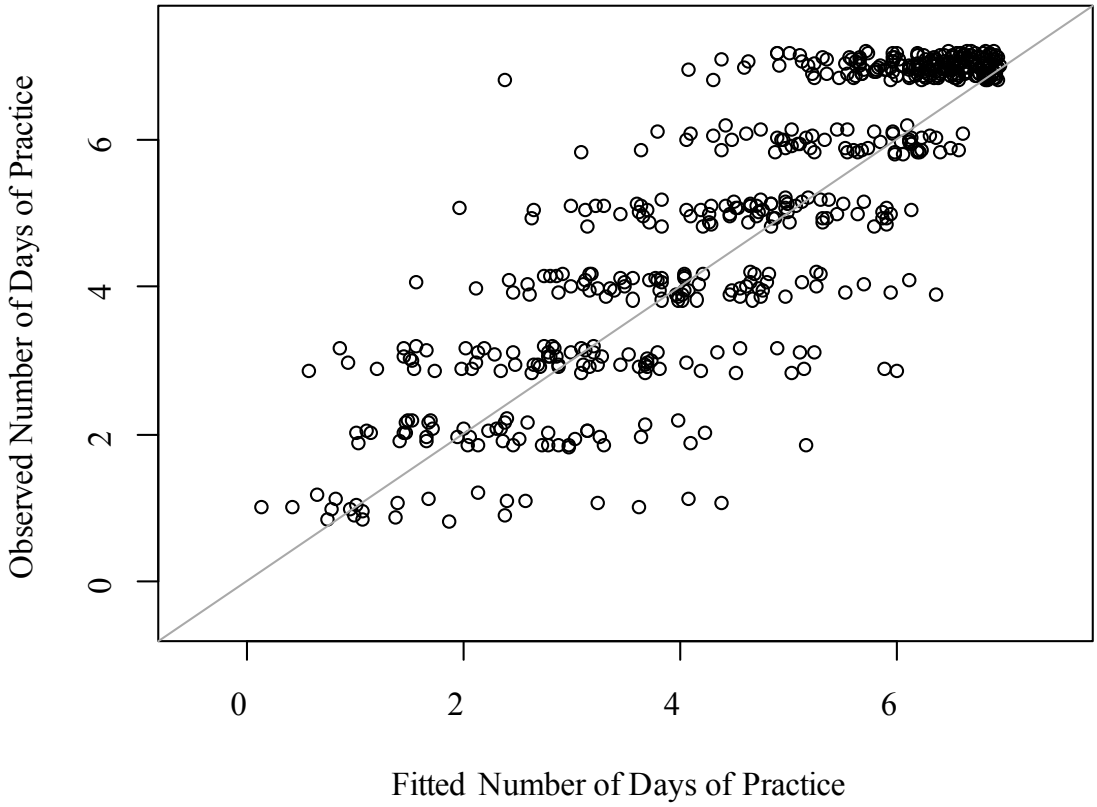
Standardised Pearson Residuals Against Fitted Probabilities for the Multivariable Regression Model

Six distinct bands of residuals, corresponding to the six possible observed counts, are seen in the plot below.



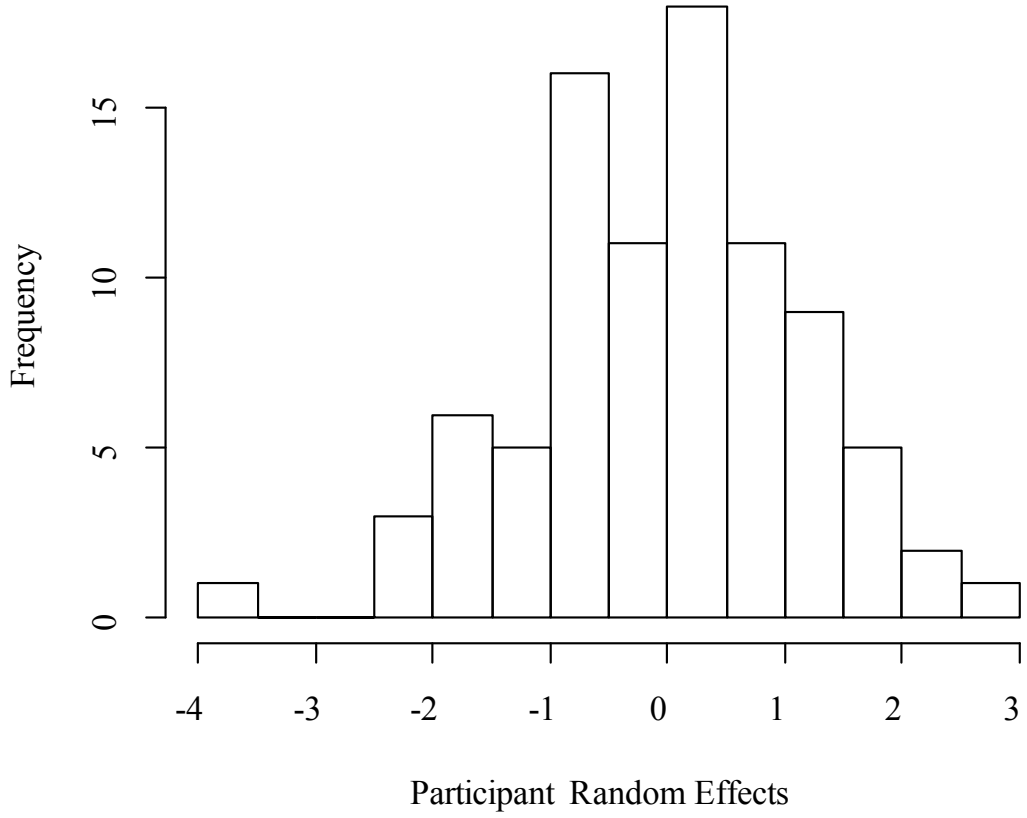
Observed Number of Days Home Practice was Completed Versus Fitted Number of Days

For each combination of participant and session, the observed number of days of home practice was compared to the expected number below. Observed and expected numbers follow each other fairly closely.



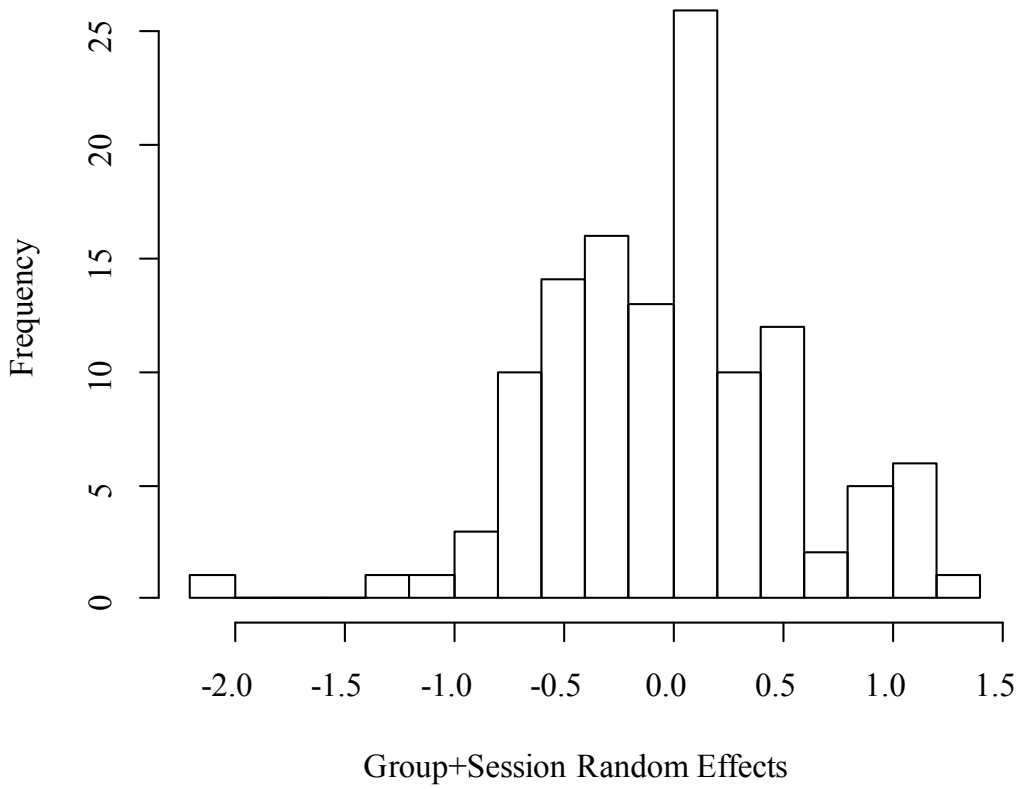
Distribution of Random Effects for Caregivers in the Sample

There appears to be one large negative random effect, but the distribution appears to be fairly normal.



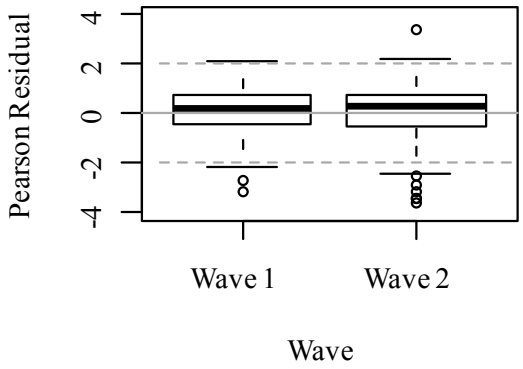
Distribution of Random Effects for Group plus Session in the Sample

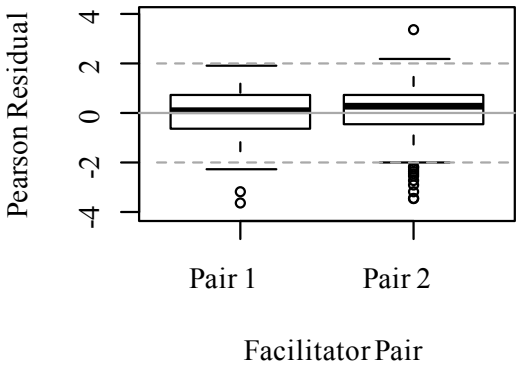
While not perfect, the assumption of normality appears to be upheld.

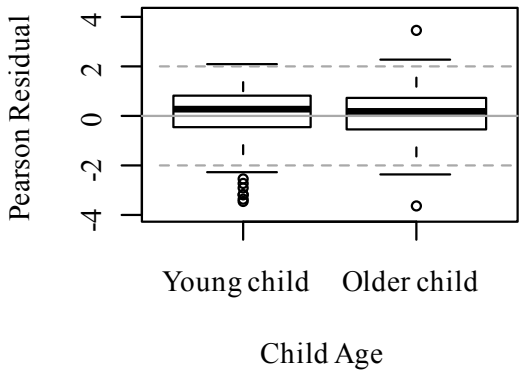


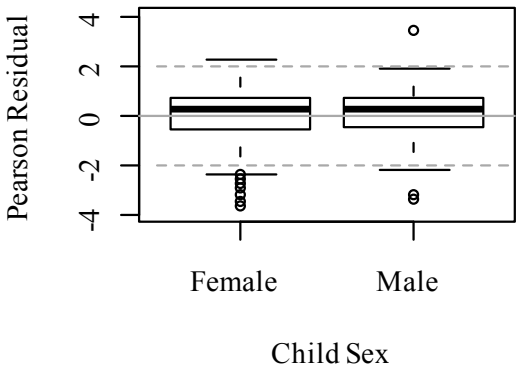
Standardised Pearson Residual Against Individual Predictors for the Multivariable Model

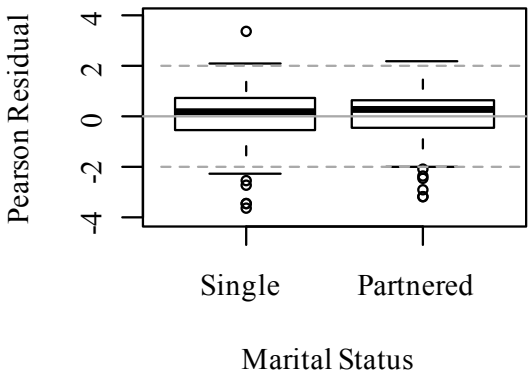
Model fit appears to be reasonable. For the continuous predictors, the assumption of linearity is not violated. To ease convergence of the model-fitting algorithms, continuous predictors were standardised. These standardised predictors are shown in the plots below.

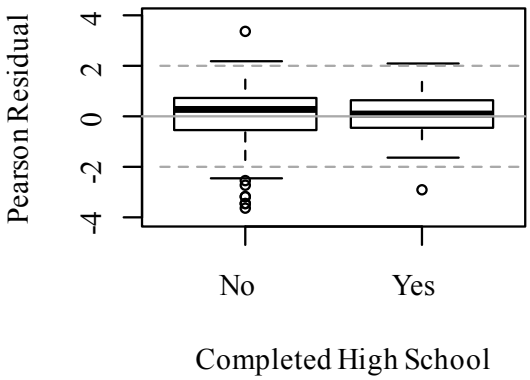


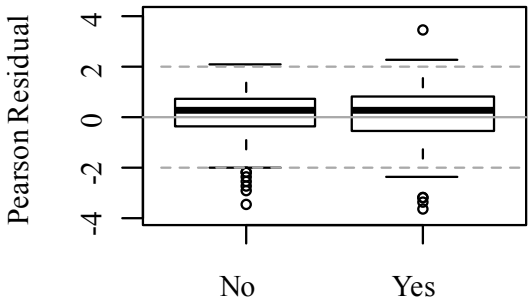


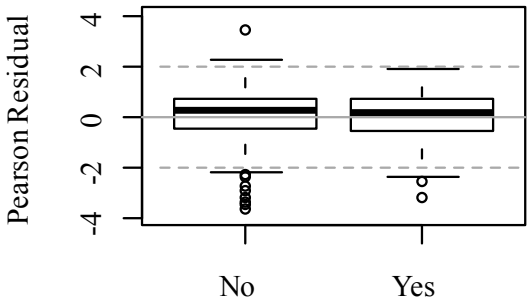


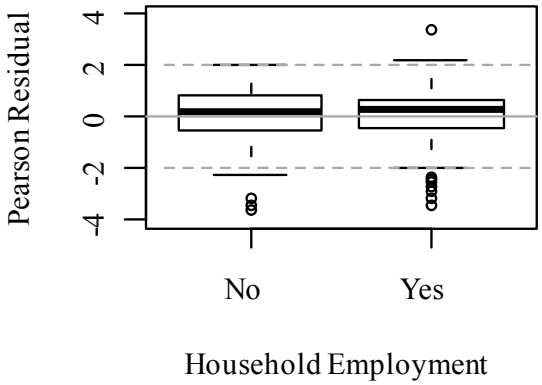


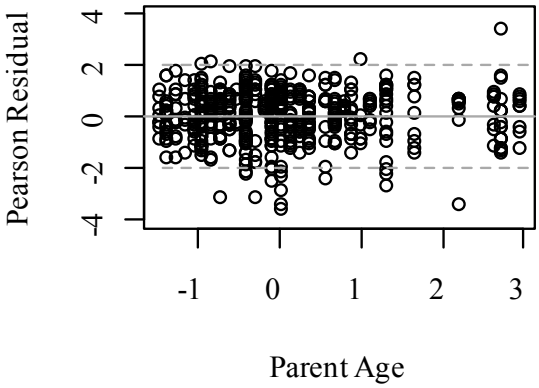

Pearson Residual
-4
-2
0
2
4
Single
Partnered
Marital Status

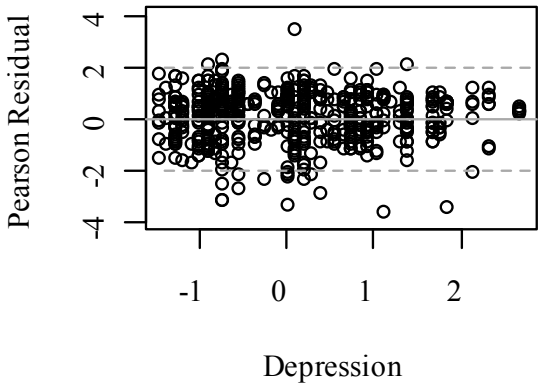

Pearson Residual
-4
-2
0
2
4
No
Yes
Completed High School

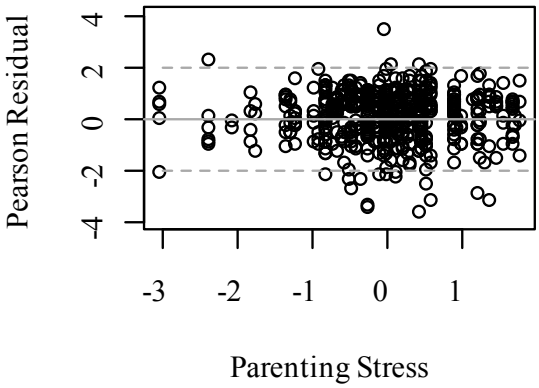

Pearson Residual
-4
-2
0
2
4
No
Yes
Experience of IPV

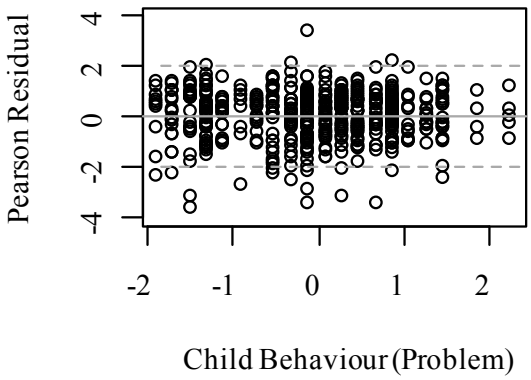

Pearson Residual
-4
-2
0
2
4
No
Yes
Alcohol Misuse

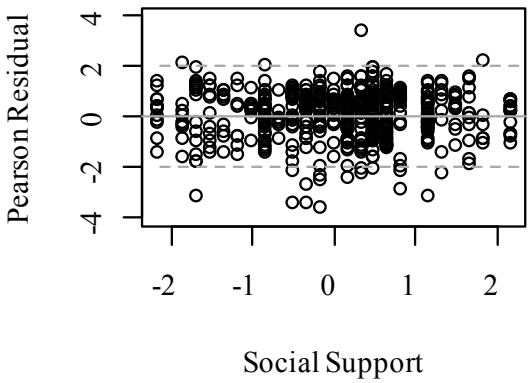

Pearson Residual
4
2
0
-2
-4
No
Yes
Household Employment

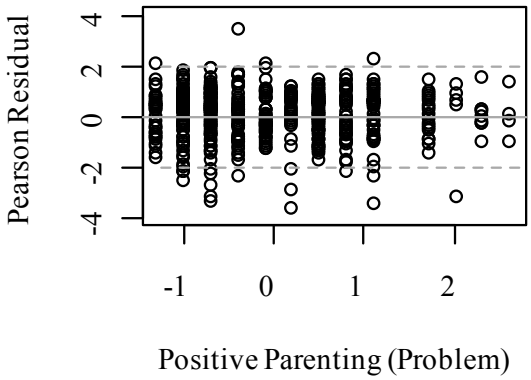

Pearson Residual
4
2
0
-2
-4
-1
0
1
2
3
Parent Age

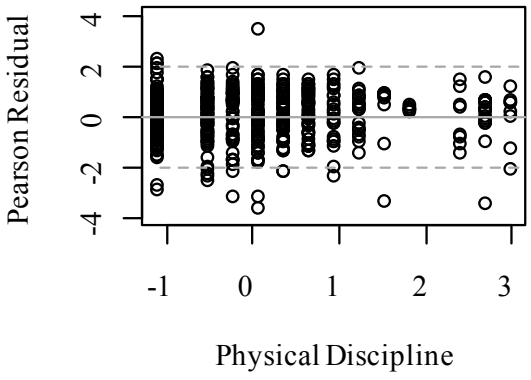

Pearson Residual
4
2
0
-2
-4
-1
0
1
2
Depression

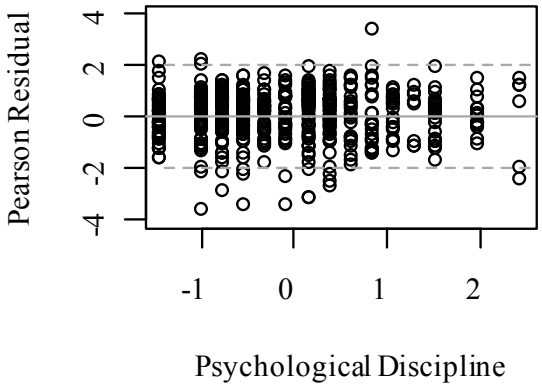

Pearson Residual
4
2
0
-2
-4
-3
-2
-1
0
1
Parenting Stress

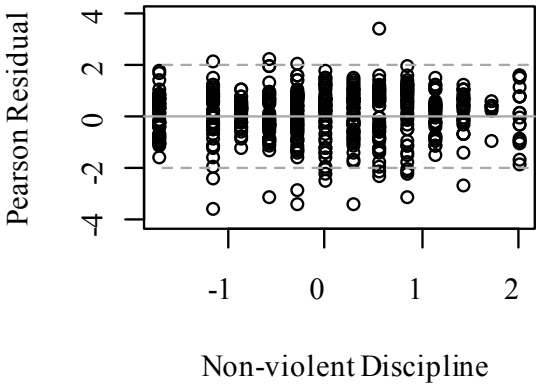

Pearson Residual
-4
-2
0
2
4
-2
-1
0
1
2
Child Behaviour (Problem)

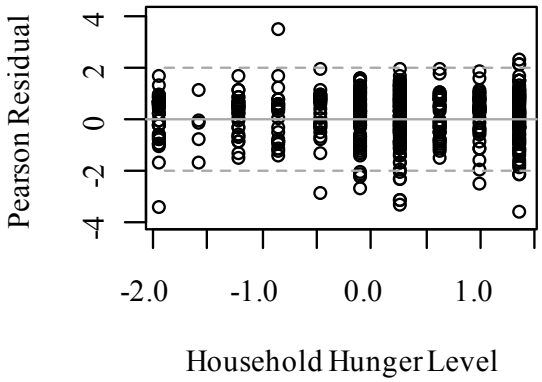

Pearson Residual
-4
-2
0
2
4
-2
-1
0
1
2
Social Support

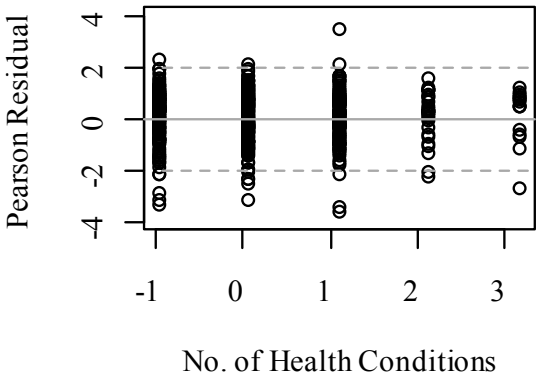

Pearson Residual
-4
-2
0
2
4
-1
0
1
2
Positive Parenting (Problem)


Pearson Residual
-4
-2
0
2
4
-1
0
1
2
3
Physical Discipline


Pearson Residual
-4
-2
0
2
4
-1
0
1
2
Psychological Discipline


Pearson Residual
-4
-2
0
2
4
-1
0
1
2
Non-violent Discipline

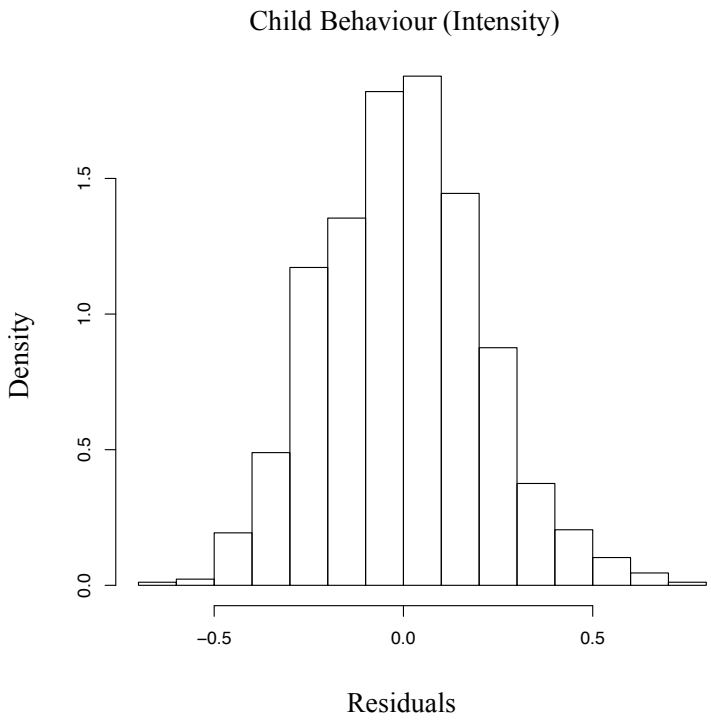

Pearson Residual
-4
-2
0
2
4
-2.0
-1.0
0.0
1.0
Household Hunger Level

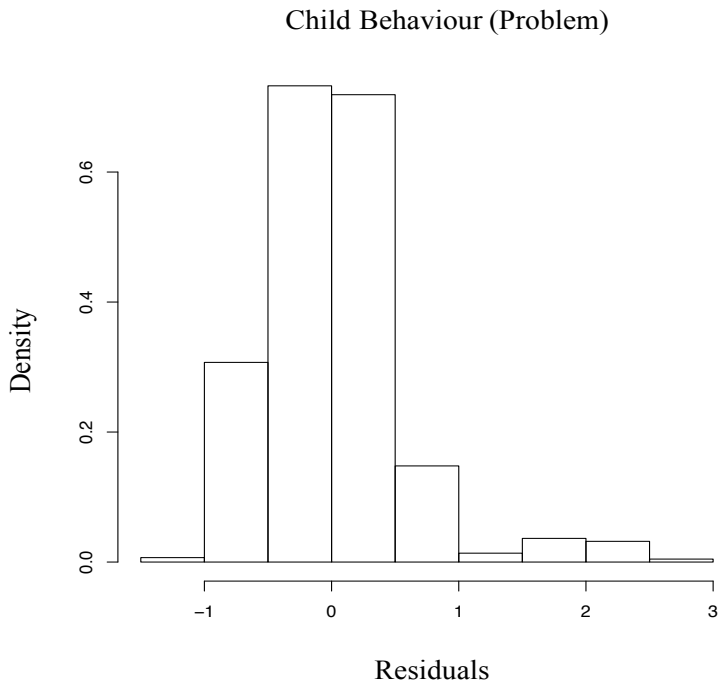

Pearson Residual
-4
-2
0
2
4
-1
0
1
2
3
No. of Health Conditions

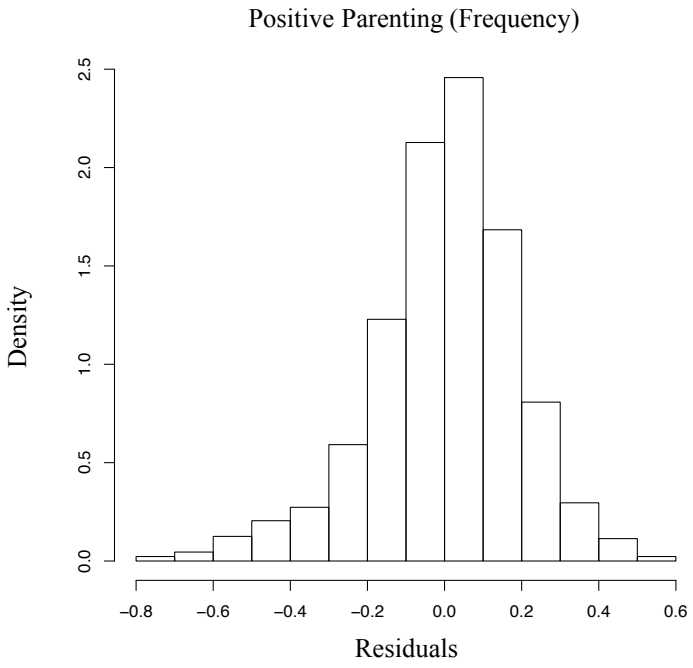
Appendix S: Diagnostic Plots for Dose-effect Models

The diagnostic plots, including histograms of model residuals and scatterplots of residuals against fitted outcomes, for the dose-effect models are presented below.

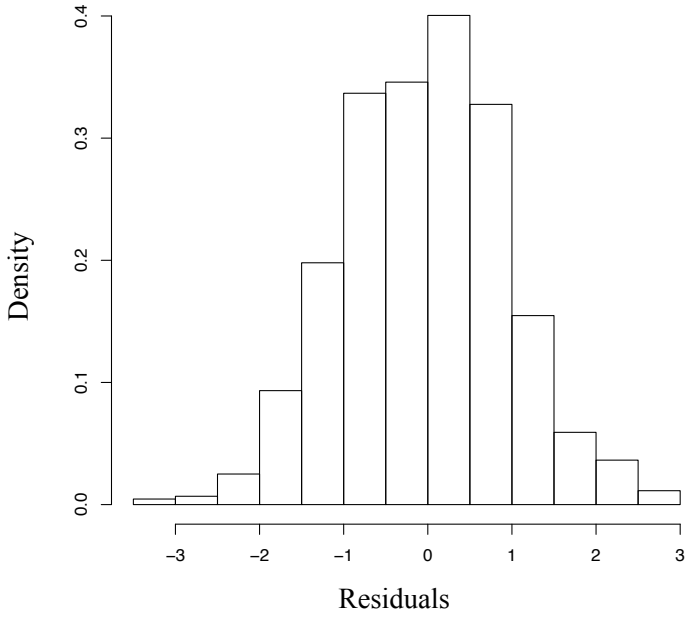
Histograms of Model Residuals



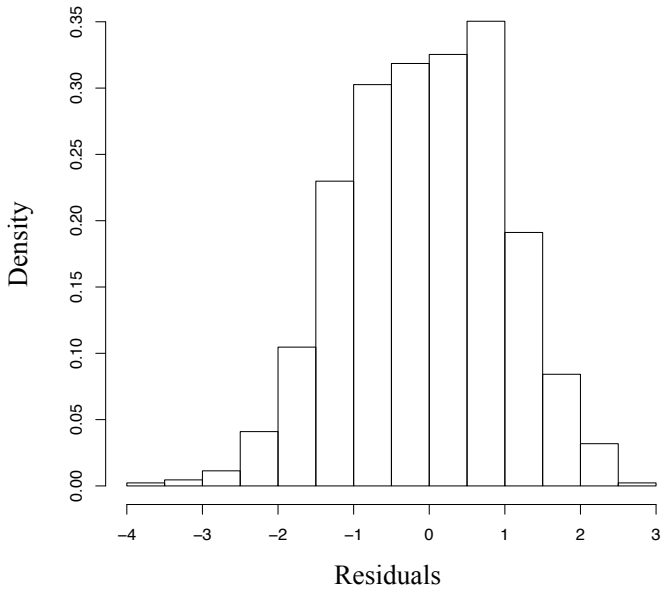

Child Behaviour (Problem)
Density
0.0
0.2
0.4
0.6
−1
0
1
2
3
Residuals

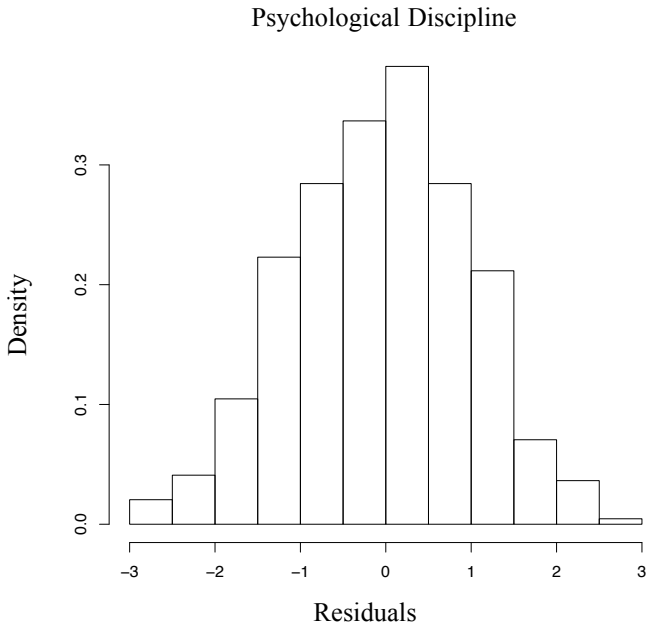

Positive Parenting (Frequency)
Density
0.0
0.5
1.0
1.5
2.0
2.5
−0.8
−0.6
−0.4
−0.2
0.0
0.2
0.4
0.6
Residuals

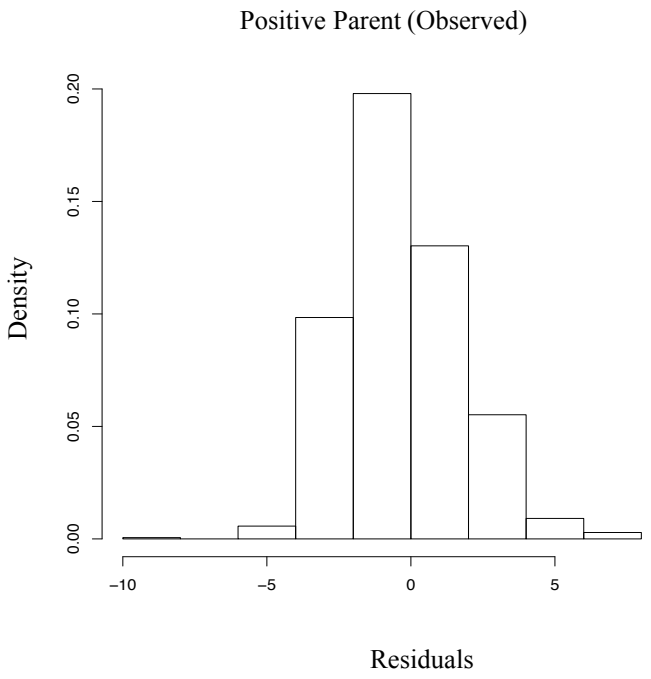
Positive Parenting (Problem)

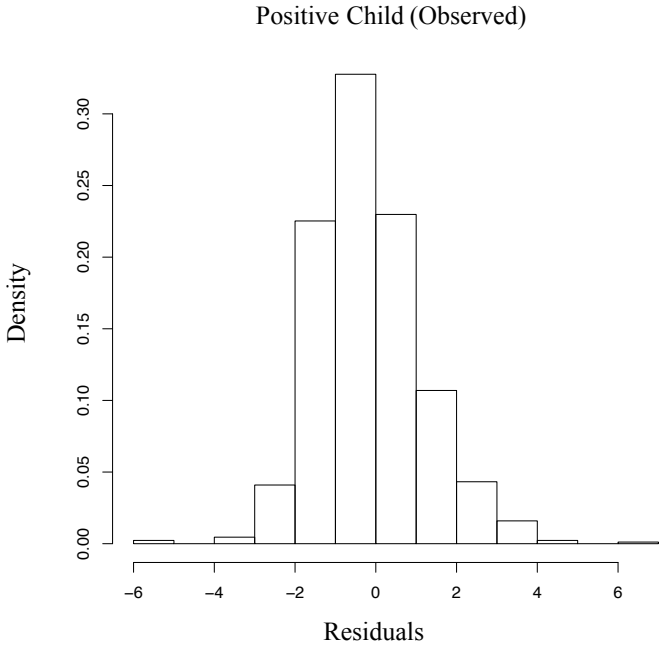


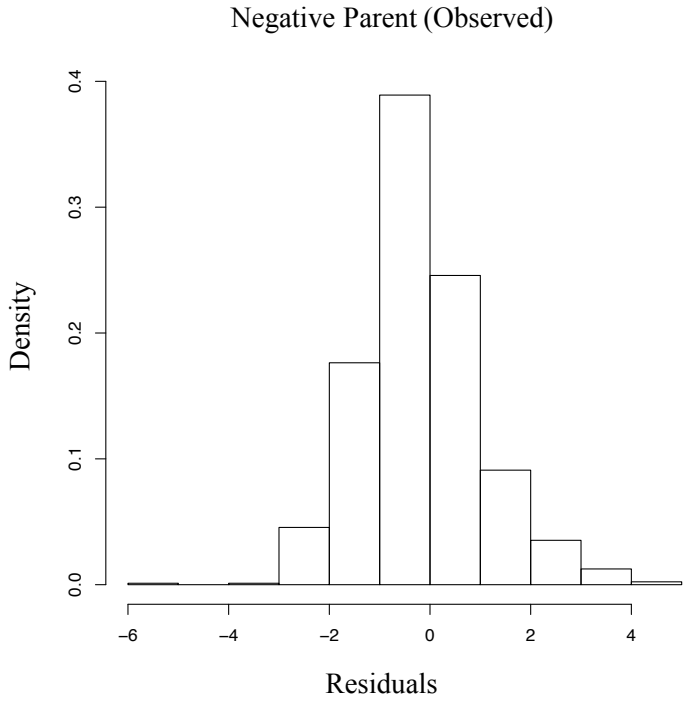
Physical Discipline

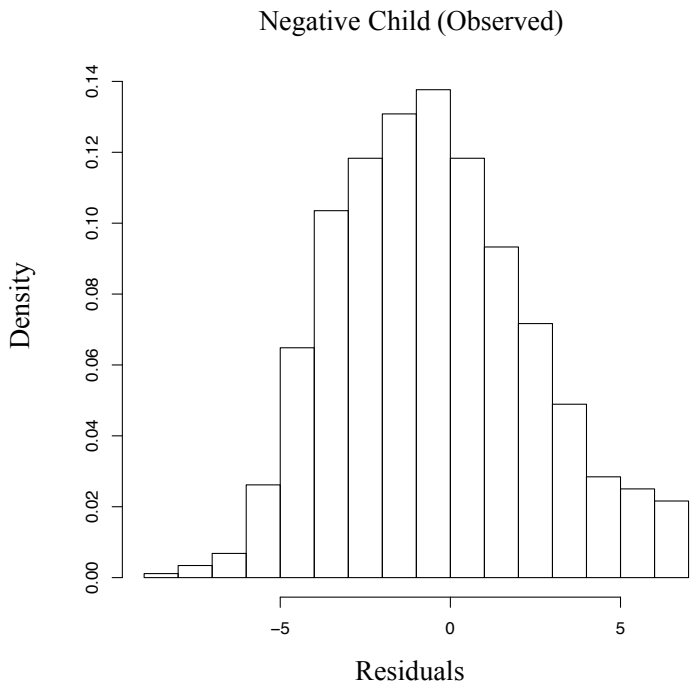



Psychological Discipline
Density
0.0
0.1
0.2
0.3
−3
−2
−1
0
1
2
3
Residuals

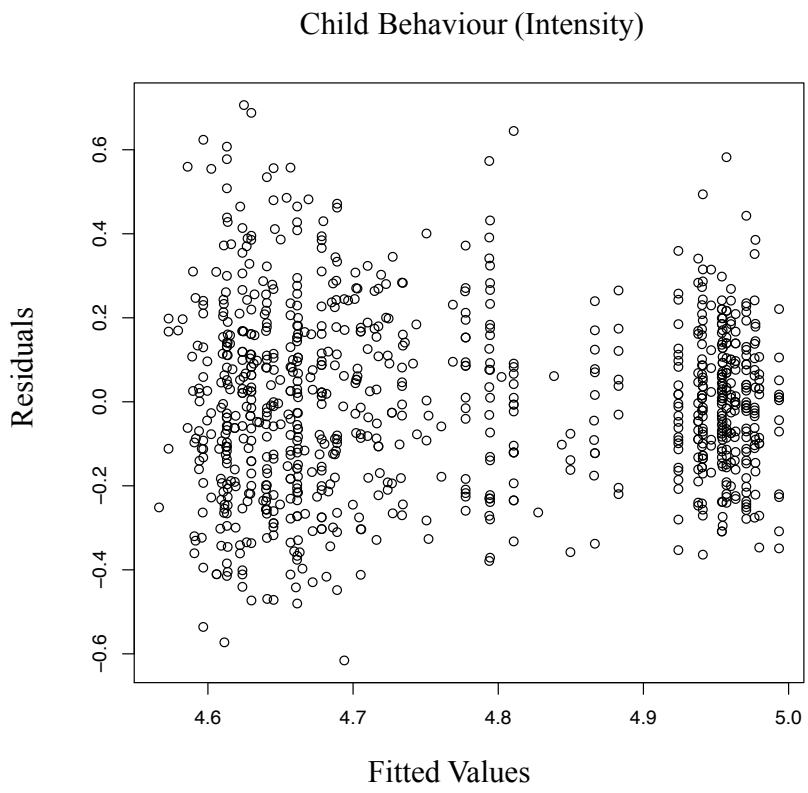

Positive Parent (Observed)
Density
0.00
0.05
0.10
0.15
0.20
−10
−5
0
5
Residuals


Positive Child (Observed)
Density
0.00
0.05
0.10
0.15
0.20
0.25
0.30
−6
−4
−2
0
2
4
6
Residuals

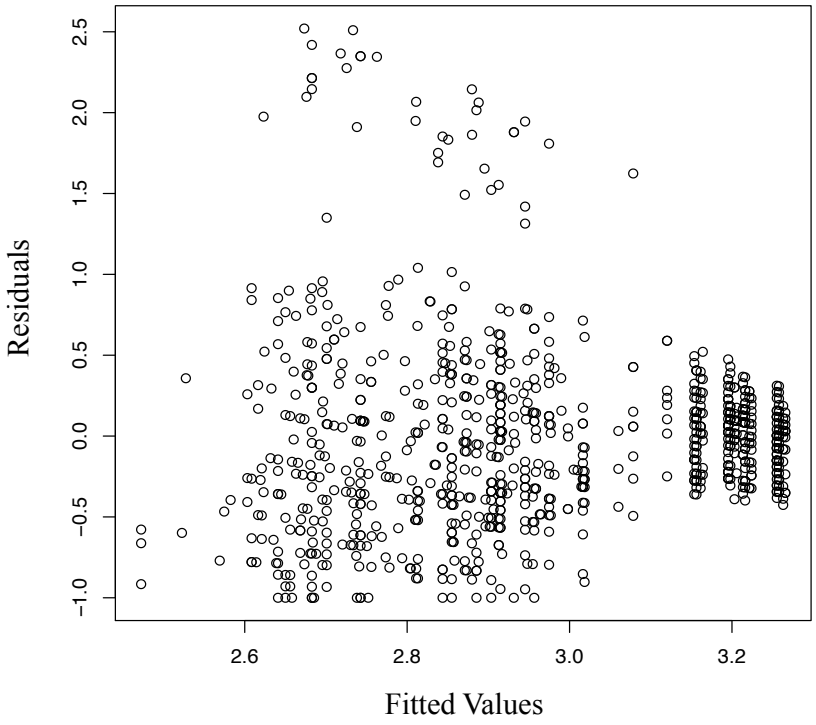

Negative Parent (Observed)
Density
0.0
0.1
0.2
0.3
0.4
−6
−4
−2
0
2
4
Residuals



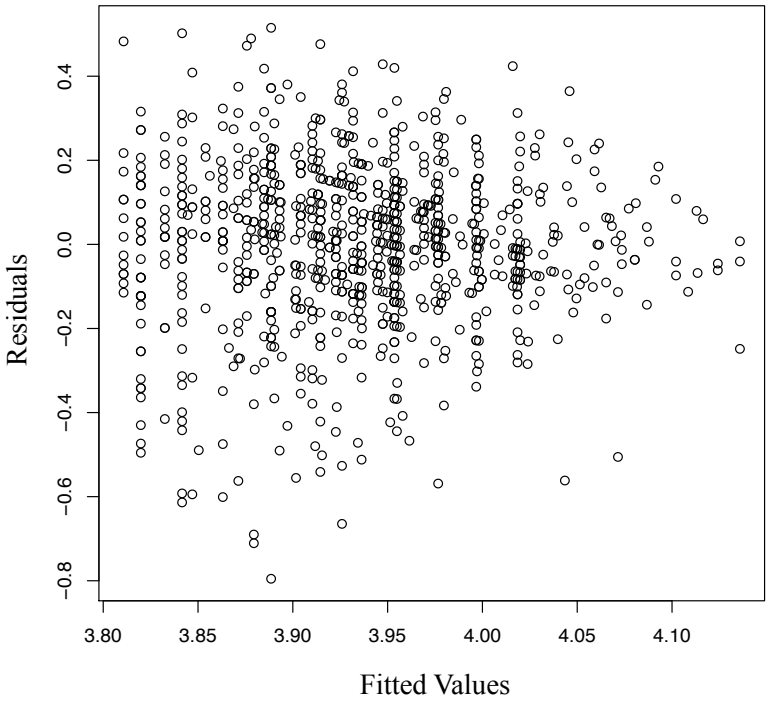
Scatterplots of Residuals Against Fitted Outcomes



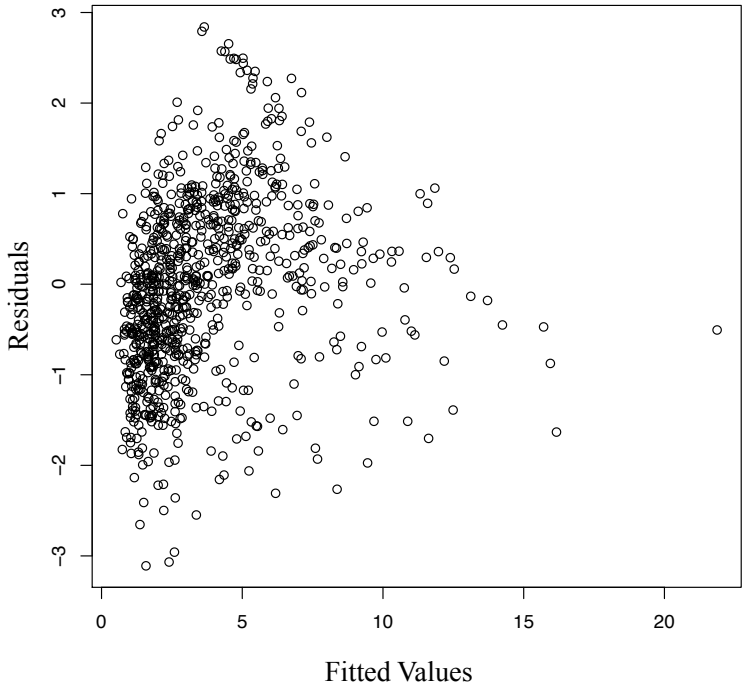
Child Behaviour (Problem)



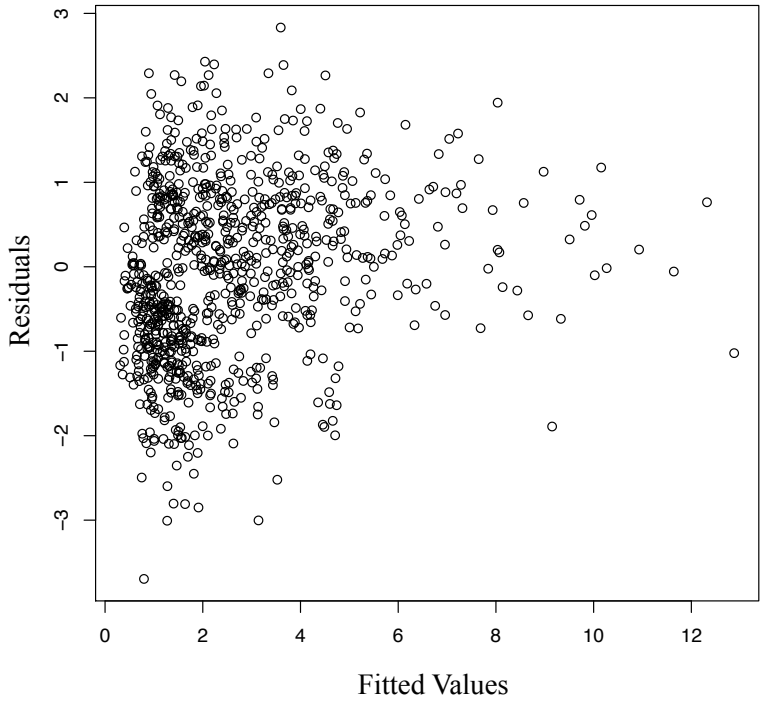
Positive Parenting (Frequency)



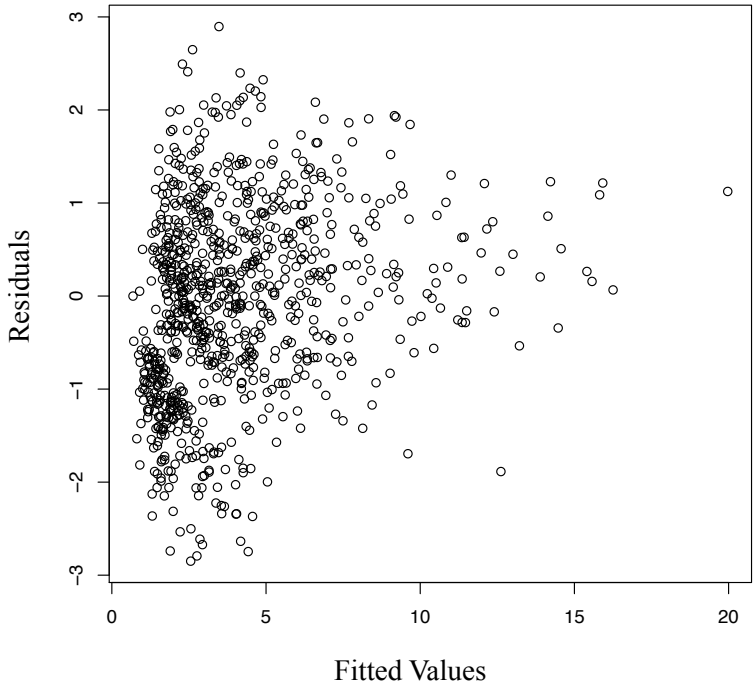
Positive Parenting (Problem)



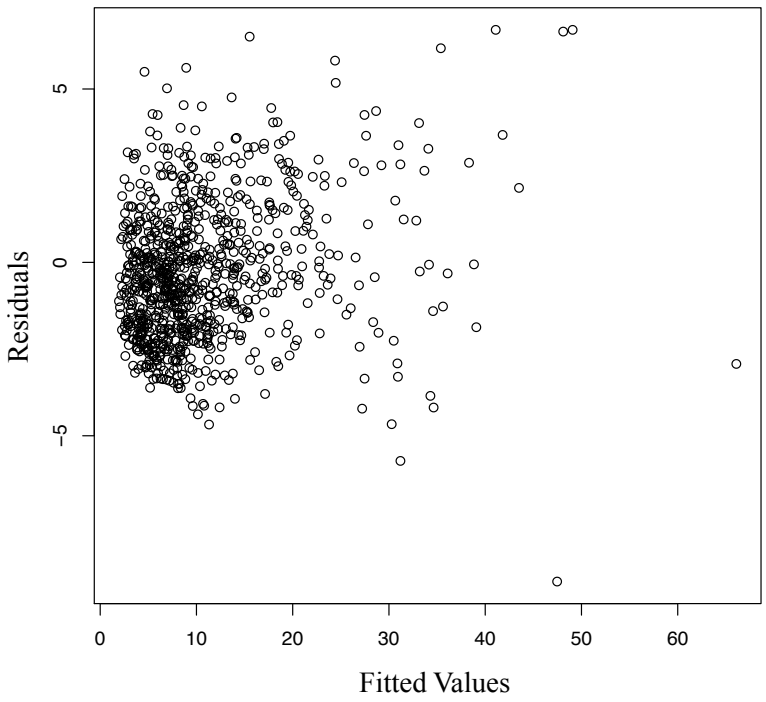
Physical Discipline



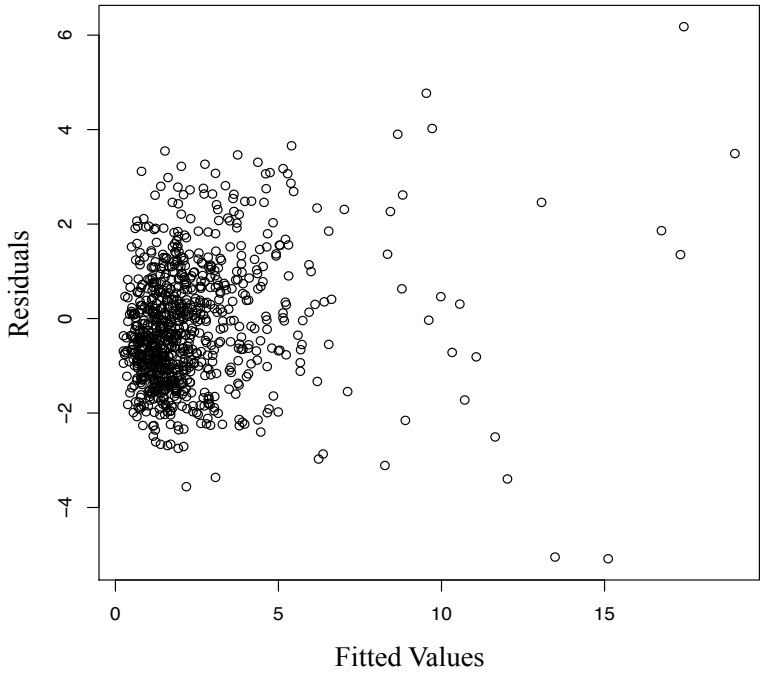
Psychological Discipline



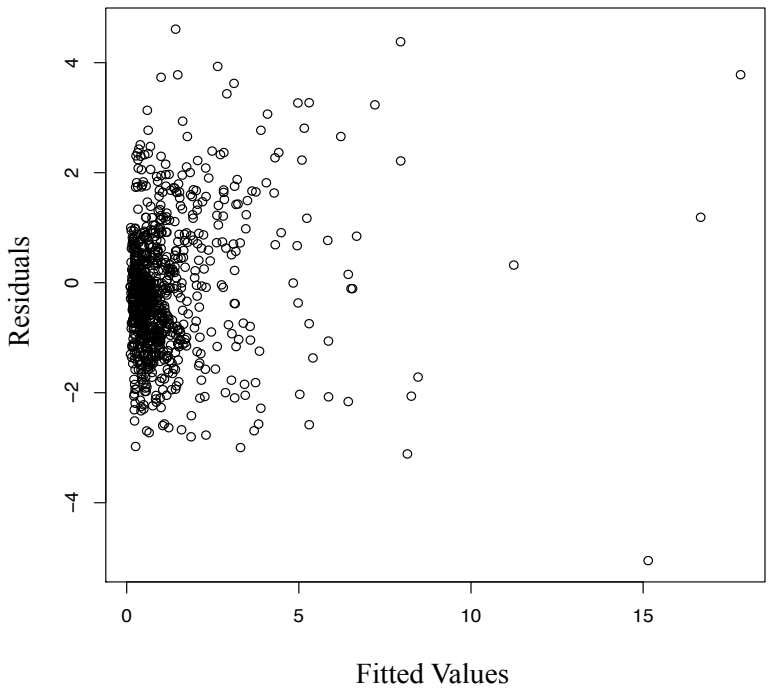
Positive Parent (Observed)

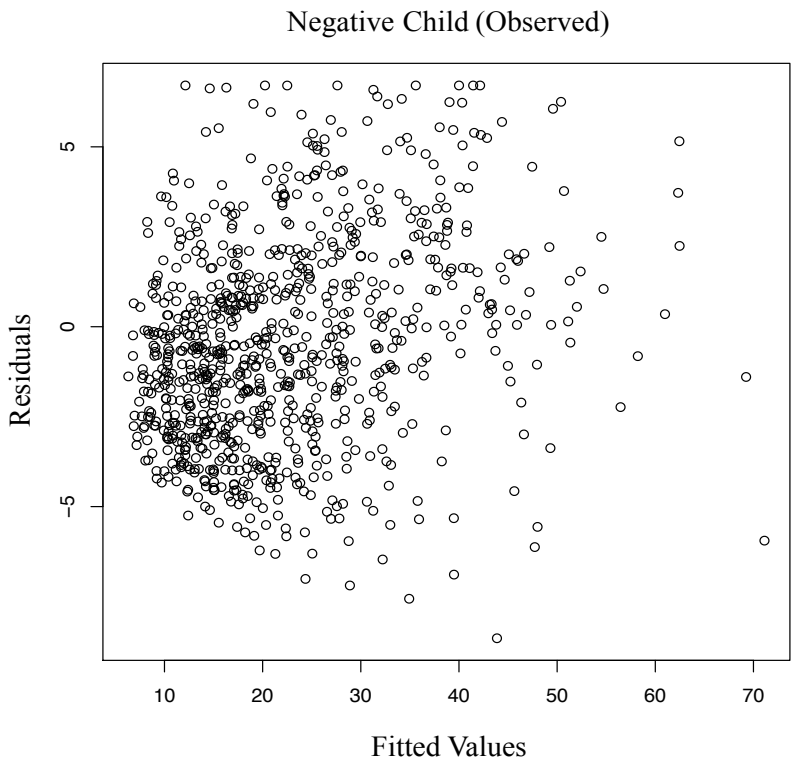


Positive Child (Observed)



Negative Parent (Observed)




Negative Child (Observed)
Residuals
5
0
−5
10
20
30
40
50
60
70
Fitted Values

Appendix T: Complete Dose-Effect Results

In all of the tables that follow, the following notes apply:

[*] The mean response for the reference group at baseline (i.e., Wave 1, no IPV, male child, younger child). The next four lines capture multiplicative adjustments for wave, IPV, child sex, and child age.

[**] The ratio change in mean response from baseline to post-test for the reference group (i.e., Wave 1, no IPV) when there is zero attendance. The next five lines capture multiplicative adjustments by wave, IPV, and attendance.

[***] The ratio change in mean response from baseline to one-year follow-up for the reference group (i.e., Wave 1, no IPV) when there is zero attendance. The next five lines capture multiplicative adjustments by wave, IPV, and attendance.

Dose-effect Results: ECBI Intensity Scale

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
(Intercept)*	141.95 [137.08, 146.99]	<.01	141.83 [136.98, 146.86]	<.01
Wave 2	0.99 [0.95, 1.03]	.52	0.99 [0.95, 1.03]	.51
IPV	1.02 [0.98, 1.07]	.30	1.02 [0.98, 1.07]	.30
Female child	1.02 [0.99, 1.04]	.25	1.02 [0.99, 1.04]	.23
Older child	0.98 [0.95, 1.01]	.18	0.98 [0.96, 1.01]	.21
Post-test**	0.77 [0.73, 0.81]	<.01	0.75 [0.71, 0.79]	<.01
Wave 2	1.12 [1.05, 1.19]	<.01	1.15 [1.07, 1.24]	<.01
IPV	1.01 [0.94, 1.08]	.75	1.05 [0.97, 1.14]	.22
Additional session	0.99 [0.99, 1.00]	.02	1.00 [0.99, 1.01]	.36
Additional session + Wave			0.99 [.98, 1.00]	.03
Additional session + IPV			0.99 [.97, 1.00]	.03
One-year follow-up***	0.72 [0.68, 0.76]	<.01	0.71 [0.67, 0.75]	<.01
Wave 2	1.04 [0.97, 1.11]	.30	1.04 [0.96, 1.12]	.34
IPV	1.01 [0.94, 1.09]	83	1.03 [0.95, 1.12]	.48
Additional session	1.00 [0.99, 1.00]	.26	1.00 [.99, 1.01]	.95
Additional session + Wave			1.00 [.99, 1.01]	.83
Additional session + IPV			0.99 [.98-1.01]	.30

Dose-effect Results: ECBI Problem Scale

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
(Intercept)*	24.45 [22.50, 26.58]	<.01	24.41 [22.46, 26.53]	<.01
Wave 2	1.00 [0.91, 1.10]	.95	1.00 [0.91, 1.10]	.96
IPV	1.01 [0.91, 1.12]	.88	1.01 [0.91, 1.11]	.88
Female child	1.06 [0.99, 1.13]	.09	1.06 [0.99, 1.14]	.08
Older child	0.96 [0.89, 1.02]	.20	0.96 [0.90, 1.03]	.23
Post-test**	0.76 [0.67, 0.86]	<.01	0.71 [0.62, 0.82]	<.01
Wave 2	1.04 [0.89, 1.22]	.62	1.10 [0.93, 1.31]	.28
IPV	1.00 [0.84, 1.18]	.96	1.10 [0.91, 1.33]	.34
Additional session	0.98 [0.97, 1.00]	.05	1.01 [0.98, 1.03]	.52
Additional session + Wave			0.97 [0.94, 1.01]	.12
Additional session + IPV			0.96 [0.93, 1.00]	.04
One-year follow-up***	0.61 [0.53, 0.70]	<.01	0.60 [0.51, 0.70]	<.01
Wave 2	1.17 [0.98, 1.38]	.08	1.23 [1.00, 1.49]	.04
IPV	1.02 [0.84, 1.22]	.86	0.97 [0.77, 1.20]	.75
Additional session	1.00 [0.98, 1.01]	.58	1.00 [0.97, 1.03]	.93
Additional session + Wave			0.98 [0.95, 1.02]	.32
Additional session + IPV			1.02 [0.98, 1.05]	.37

Dose-effect Results: PARYC Frequency Score

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate	*p*
(Intercept)*	46.62 [44.79, 48.51]	<.01	46.62 [44.80, 48.51]	<.01
Wave 2	1.07 [1.02, 1.12]	<.01	1.07 [1.02,1.12]	<.01
IPV	0.99 [0.94, 1.04]	.73	0.99 [0.94, 1.04]	.73
Female child	0.98 [0.95, 1.00]	.10	0.98 [0.95, 1.00]	.10
Older child	1.04 [1.02, 1.07]	<.01	1.04 [1.02, 1.07]	<.01
Post-test**	1.07 [1.01, 1.12]	.01	1.09 [1.03, 1.15]	<.01
Wave 2	0.93 [0.87, 0.99]	.02	0.90 [0.84, 0.97]	.01
IPV	1.01 [0.94, 1.08]	.83	0.99 [0.91, 1.07]	.73
Additional session	1.01 [1.01, 1.02]	<.01	1.01 [1.00, 1.02]	.05
Additional session + Wave			1.01 [1.00, 1.02]	.09
Additional session + IPV			1.01 [1.00, 1.02]	.20
One-year follow-up***	1.14 [1.08, 1.20]	<.01	1.14 [1.09, 1.21]	<.01
Wave 2	0.96 [0.90, 1.02]	.16	0.94 [0.87, 1.01]	.07
IPV	0.95 [0.89, 1.02]	.19	0.97 [0.90, 1.05]	.43
Additional session	1.00 [0.99, 1.00]	.84	1.00 [0.99, 1.01]	.54
Additional session + Wave			1.01 [1.00, 1.02]	.23
Additional session + IPV			1.00 [0.99, 1.01]	.58

Dose-effect Results: PARYC Problem Score

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
(Intercept)*	4.89 [4.15, 5.77]	<.01	4.89 [4.15, 5.76]	<.01
Wave 2	0.54 [0.44, 0.66]	<.01	0.54 [0.44, 0.66]	<.01
IPV	0.87 [0.70, 1.08]	.21	0.87 [0.70, 1.08]	.21
Female child	1.38 [1.23, 1.56]	<.01	1.38 [1.23, 1.56]	<.01
Older child	0.94 [0.83, 1.06]	.30	0.94 [0.83,1.06]	.29
Post-test**	0.59 [0.47, 0.74]	<.01	0.55 [0.43, 0.70]	<.01
Wave 2	2.35 [1.76, 1.33]	<.01	2.46 [1.79, 3.38]	<.01
IPV	0.93 [0.68, 1.28]	.66		
Additional session	0.95 [0.93, 0.98]	<.01	0.99 [0.95, 1.03]	.58
Additional session + Wave			0.97 [0.92, 1.02]	.27
Additional session + IPV			0.94 [0.89, 0.99]	.02
One-year follow-up***	0.36 [0.28, 0.46]	<.01	0.38 [0.29, 0.48]	<.01
Wave 2	2.34 [1.74, 3.15]	<.01	2.32 [1.66, 3.25]	<.01
IPV	1.19 [0.86, 1.64]	.30	1.04 [0.71, 1.51]	.85
Additional session	1.01 [0.98, 1.04]	.44	0.99 [0.95, 1.03]	.54
Additional session + Wave			1.02 [0.97, 1.07]	.56
Additional session + IPV			1.04 [0.99, 1.10]	.13

Dose-effect Results: ICAST-P Physical Discipline

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
(Intercept)*	3.16 [2.68, 3.72]	<.01	3.15 [2.67, 3.70]	<.01
Wave 2	0.85 [0.70, 1.02]	.08	0.85 [0.70, 1.02]	.08
IPV	1.46 [1.20, 1.77]	.00	1.46 [0.70, 1.02]	<.01
Female child	1.35 [1.19, 1.53]	<.01	1.36 [1.20, 1.54]	<.01
Older child	1.07 [0.94, 1.21]	.31	1.06 [0.94, 1.20]	.36
Post-test**	0.39 [0.31, 0.50]	<.01	0.34 [0.26, 0.44]	<.01
Wave 2	1.82 [1.36, 2.43]	<.01	2.23 [1.61, 3.07]	<.01
IPV	1.17 [0.87, 1.59]	.30	1.25 [0.89, 1.76]	.19
Additional session	0.96 [0.94, 0.99]	.00	1.02 [0.97, 1.06]	.47
Additional session + Wave			0.91 [0.87, 0.96]	<.01
Additional session + IPV			0.96 [0.91, 1.02]	.19
One-year follow-up***	0.34 [0.26, 0.44]	<.01	0.36 [0.27, 0.47]	<.01
Wave 2	0.99 [0.72, 1.35]	.93	1.03 [0.72, 1.47]	.86
IPV	0.96 [0.69, 1.34]	.81	0.77 [0.53, 1.14]	.20
Additional session	0.98 [0.95, 1.01]	.14	0.95 [0.91, 1.00]	.07
Additional session + Wave			0.99 [0.93, 1.05]	.78
Additional session + IPV			1.07 [1.00, 1.14]	.04

Dose-effect Results: ICAST-P Psychological Discipline

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
(Intercept)*	5.36 [4.78, 6.01]	<.01	5.35 [4.77, 6.00]	<.01
Wave 2	0.80 [0.70, 0.92]	<.01	0.80 [0.71, 0.92]	<.01
IPV	1.32 [1.15, 1.51]	<.01	1.32 [0.15, 1.51]	<.01
Female child	1.22 [1.12, 1.34]	<.01	1.23 [1.12, 1.34]	<.01
Older child	1.10 [1.00, 1.20]	.04	1.10 [1.00, 1.20]	.04
Post-test**	0.43 [0.36, 0.51]	<.01	0.39 [0.32, 0.47]	<.01
Wave 2	1.48 [1.21, 1.83]	<.01	1.70 [1.35, 2.14]	<.01
IPV	1.12 [0.90, 1.39]	.31	1.19 [0.94, 1.52]	.15
Additional session	0.98 [0.96, 1.00]	.01	1.02 [0.99, 1.05]	.31
Additional session + Wave			0.94 [0.91, 0.98]	<.01
Additional session + IPV			0.97 [0.93, 1.01]	.12
One-year follow-up***	0.31 [0.26, 0.38]	<.01	0.30 [0.25, 0.37]	<.01
Wave 2	1.36 [1.09, 1.71]	.01	1.49 [1.15, 1.93]	<.01
IPV	0.94 [0.74, 1.20]	.62	0.93 [0.70, 1.22]	.59
Additional session	0.99 [0.97, 1.02]	.62	1.01 [0.97, 1.04]	.61
Additional session + Wave			0.97 [0.93, 1.01]	.14
Additional session + IPV			1.00 [0.96, 1.05]	.99

Dose-effect Results: Positive Parent Behaviour (Observed)

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
(Intercept)*	18.17 [17.20, 19.20]	<.01	18.09 [17.11, 19.13]	<.01
Wave 2	1.14 [1.07, 1.22]	<.01	1.14 [1.07, 1.22]	<.01
IPV	1.01 [0.95, 1.09]	.68	1.02 [0.95, 1.09]	.62
Female child	0.93 [0.87, 0.98]	.01	0.93 [0.87, 0.98]	.01
Older child	0.56 [0.53, 0.60]	<.01	0.56 [0.53, 0.59]	<.01
Post-test**	0.72 [0.66, 0.78]	<.01	0.78 [0.72, 0.85]	<.01
Wave 2	0.89 [0.76, 1.04]	.16	0.81 [0.67, 0.97]	.03
IPV	0.98 [0.86, 1.12]	.77	0.85 [0.72, 0.99]	.04
Additional session	1.04 [1.03, 1.05]	<.01	1.01 [1.00, 1.02]	.21
Additional session + Wave			1.04 [0.02, 1.06]	<.01
Additional session + IPV			1.04 [0.02, 1.06]	<.01
One-year follow-up***	0.48 [0.43, 0.54]	<.01	0.51 [0.46, 0.58]	<.01
Wave 2	0.96 [0.83, 1.11]	.56	0.85 [0.71, 1.01]	.07
IPV	0.77 [0.64, 0.92]	.00	0.75 [0.57, 0.99]	.04
Additional session	1.03 [1.01, 1.05]	<.01	1.00 [0.97, 1.03]	.76
Additional session + Wave			1.07 [0.04, 1.10]	<.01
Additional session + IPV			1.01 [0.98, 1.05]	.58

Dose-effect Results: Negative Parent Behaviour (Observed)

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate	*p*
(Intercept)*	3.82 [3.41, 4.28]	<.01	3.79 [3.38, 4.24]	<.01
Wave 2	0.76 [0.66, 0.87]	.00	0.76 [0.66, 0.88]	<.01
IPV	0.89 [0.76, 1.03]	.13	0.89 [0.76, 1.04]	.14
Female child	1.10 [0.99, 1.21]	.07	1.10 [1.00, 1.22]	.05
Older child	0.86 [0.78, 0.95]	.00	0.86 [0.78, 0.94]	<.01
Post-test**	0.77 [0.66, 0.90]	.00	0.82 [0.69, 0.97]	.02
Wave 2	1.11 [0.89, 1.38]	.36	1.00 [0.77, 1.29]	.97
IPV	0.95 [0.75, 1.20]	.65	0.88 [0.65, 1.18]	.38
Additional session	1.01 [0.99, 1.02]	.47	0.98 [0.95, 1.01]	.11
Additional session + Wave			1.05 [1.01, 1.09]	.01
Additional session + IPV			1.03 [0.98, 1.07]	.24
One-year follow-up***	0.40 [0.31, 0.51]	<.01	0.37 [0.28, 0.48]	<.01
Wave 2	2.69 [1.96, 3.70]	<.01	3.17 [2.26, 4.44]	<.01
IPV	0.66 [0.45, 0.95]	.03	0.53 [0.31, 0.89]	.02
Additional session	0.99 [0.95, 1.02]	.44	1.05 [1.01, 1.10]	.02
Additional session + Wave			0.86 [0.82, 0.91]	<.01
Additional session + IPV			1.04 [0.95, 1.14]	.38

Dose-effect Results: Negative Child Behaviour (Observed)

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
(Intercept)*	3.06 [2.65, 3.52]	<.01	3.06 [2.66, 3.52]	<.01
Wave 2	0.55 [0.46, 0.67]	<.01	0.56 [0.46, 0.67]	<.01
IPV	0.82 [0.67, 1.01]	.06	0.83 [0.68, 1.02]	.07
Female child	1.05 [0.92, 1.19]	.47	1.05 [0.92, 1.19]	.47
Older child	0.56 [0.49, 0.65]	<.01	0.56 [0.48, 0.64]	<.01
Post-test**	0.66 [0.54, 0.81]	<.01	0.73 [0.59, 0.90]	<.01
Wave 2	1.51 [1.14, 2.01]	<.01	1.36 [0.99, 1.87]	.06
IPV	1.31 [0.98, 1.76]	.07	1.05 [0.73, 1.49]	.80
Additional session	0.99 [0.97, 1.01]	.29	0.95 [0.92, 0.98]	.01
Additional session + Wave			1.04 [1.00, 1.09]	.06
Additional session + IPV			1.07 [1.02, 1.12]	.01
One-year follow-up***	0.25 [0.18, 0.33]	<.01	0.24 [0.18, 0.34]	<.01
Wave 2	1.64 [1.10, 2.46]	.02	1.68 [1.03, 2.75]	.04
IPV	0.73 [0.43, 1.23]	.24	0.76 [0.37, 1.55]	.45
Additional session	1.01 [0.97, 1.05]	.61	1.01 [0.96, 1.07]	.60
Additional session + Wave			0.99 [0.92, 1.07]	.85
Additional session + IPV			0.99 [0.90, 1.09]	.84

Dose-effect Results: Postive Child Behaviour (Observed)

	Excluding Moderators		Including Moderators	
Model Parameter	Estimate [95% CI]	*p*	Estimate [95% CI]	*p*
(Intercept)*	38.83 [37.01, 40.74]	<.01	38.82 [37.01, 40.73]	<.01
Wave 2	0.79 [0.75, 0.83]	<.01	0.79 [0.75, 0.83]	<.01
IPV	0.89 [0.85, 0.94]	<.01	0.89 [0.85. 0.94]	<.01
Female child	1.00 [0.95, 1.05]	.86	1.00 [0.95, 1.05]	.87
Older child	0.63 [0.60, 0.66]	<.01	0.63 [0.60, 0.66]	<.01
Post-test**	0.82 [0.78, 0.87]	<.01	0.87 [0.82, 0.92]	<.01
Wave 2	0.98 [0.91, 1.06]	.67	0.85 [0.77, 0.94]	<.01
IPV	0.98 [0.91, 1.07]	.71	0.99 [0.89, 1.09]	.82
Additional session	1.02 [1.01, 1.04]	<.01	1.01 [0.99, 1.02]	.48
Additional session + Wave			1.04 [1.03, 1.06]	<.01
Additional session + IPV			1.01 [0.99, 1.02]	.29
One-year follow-up***	0.54 [0.47, 0.62]	<.01	0.56 [0.49, 0.65]	<.01
Wave 2	1.16 [1.04, 1.30]	.01	1.14 [1.01, 1.28]	.03
IPV	0.94 [0.80, 1.10]	.42	0.82 [0.70, 0.97]	.02
Additional session	1.01 [1.00, 1.02]	.24	0.99 [0.97, 1.01]	.33
Additional session + Wave			1.01 [0.98, 1.04]	.49
Additional session + IPV			1.04 [1.01, 1.06]	<.01

Appendix U: Weekly Process Form on Participant Understanding and Confidence

SINOVUYO CARING FAMILIES PROJECT

SESSION (**INSERT SESSION NUMBER**): (**INSERT NAME OF SESSION**)

Your name: _____

Child name: _____

Please let us know how this week's session was for you. We appreciate your feedback!

1. Do you understand the skills that were covered in the session?

- ☐ I understand all of the skills covered in the session
- ☐ I understand most of the skills covered in the session
- ☐ I understand some of the skills covered in the session
- ☐ I do not understand the skills covered in the session

2. Do you feel confident to practice the skills covered in the session with your child at home?

- ☐ I feel very confident to practice the skills.
- ☐ I feel mostly confident to practice the skills
- ☐ I feel fairly confident to practice the skills
- ☐ I do not feel confident to practice the skills

Appendix V: Weekly Facilitator Rating Form on Participants' Quality of Participation

SINOVUYO CARING FAMILIES PROJECT

SINOVUYO WEEKLY PARTICIPATION SURVEY

Please answer these questions for each participant in your caseload. Please indicate your responses in the Sinovuyo Participation Survey Excel Sheet.

1. **When did the parent come to the session today?**
- **4** - Arrived before session or on time
- **3** – Arrived before tea time but after the session started
- **2** – Arrived during tea time
- **1** – Arrived after tea time
- **0** – Did not attend session

2. **Did the parent do her or his home practice?**
- **3** – Did home practice activity correctly
- **2** – Did home practice but incorrectly
- **1** – Tried to do home practice but failed
- **0** – Did not try to do home practice

3. **How did the parent participate in the session?**
- **4** - Participated enthusiastically throughout the session
- **3** - Participated in most of the activities but sometimes needed prompting
- **2** - Participated in part of the session activities but only when prompted
- **1** - Participated reluctantly and was mostly silent
- **0** – Did not participate at all

4. **How interested was the parent in the session activities?**
- **4** - Parent showed a high level of interest in all of the activities (paid attention, was alert, etc.)
- **3** - Parent showed interest in most of the activities (paid attention, was alert, etc.)
- **2** - Parent showed some interest but sometimes appeared bored, distracted, or bothered
- **1** – Parent showed little interest but frequently appeared bored, distracted, or bothered
- **0** – Parent showed no interest at all

Appendix W: Overall Satisfaction Questionnaire

SINOVUYO CARING FAMILIES PROJECT

Participant Satisfaction Questionnaire

Name: _____

Date: _____

A. The Overall Programme

Please circle the response that best expresses how you honestly feel at this point.

1. The problem(s) that originally prompted me to take this programme for my child is (are)

1 = much worse
2 = slightly worse
3 = same
4 = slightly better
5 = much better

2. My child's problems which I have tried to change using the methods presented in this programme are

1 = much worse
2 = slightly worse
3 = same
4 = slightly better
5 = much better

3. My feelings about my child's progress are that I am

1 = very dissatisfied
2 = slightly dissatisfied
3 = neutral
4 = slightly satisfied
5 = very satisfied

4. To what degree has the Sinovuyo Caring Families Programme helped with other personal or family problems not directly related to your child (for example, your marriage, your feelings in general)?

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

5. My expectation for good results from the Sinovuyo Caring Families Programme is

1 = very unhopeful
2 = slightly unhopeful
3 = neutral
4 = slightly hopeful
5 = very hopeful

6. I feel that the approach used to change my child's problems in this programme is

1 = very inappropriate
2 = slightly inappropriate
3 = neutral
4 = slightly appropriate
5 = very appropriate

7. Would you recommend the programme to a friend or relative?

1 = strongly not recommend
2 = slightly not recommend
3 = neutral
4 = slightly recommend
5 = strongly recommend

8. How confident are you in managing current behavior problems in the home on your own?

1 = very unconfident
2 = unconfident
3 = neutral
4 = confident
5 = very confident

9. How confident are you in your ability to manage future behavior problems in the home using what you learned from this programme?

1 = very unconfident
2 = unconfident
3 = neutral
4 = confident

5 = very confident

10. My overall feeling about achieving my goal in this programme for my child and family is

1 = very inappropriate
2 = slightly inappropriate
3 = neutral
4 = slightly appropriate
5 = very appropriate

B. Teaching Format

In this section, we would like you to indicate how useful each of the following types of teaching is for you now. Please circle the response that most clearly describes your opinion.

11. Content of information presented was

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

12. Discussion about home practice was

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

13. Group discussion of parenting skills was

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

14. Practice of play skills at home with your child was

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

15. Other home activities (e.g., practice praise, positive comments, rewards, ignore) were

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

16. Illustrated stories from the programme were

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

17. Stories from the programme were

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

18. Weekly handouts were

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

19. Use of practice or role-plays during group sessions were

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

20. Phone calls or home visits from the group leaders were

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

C. Specific Parenting Techniques

In this section, we would like to get your ideas of how useful each of the following techniques is in improving your interactions with your child. Please circle the response that describes your experience.

21. Special Time with Children

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

22. Say What You See

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

23. Naming Feelings

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

24. Praise

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

25. Rewards

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

26. Giving Instructions

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

27. Household Rules

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

28. Ignoring

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

29. Time Out

1 = very unhelpful
2 = unhelpful
3 = neutral
4 = helpful
5 = very helpful

30. Consequences

1 = very unhelpful
2 = unhelpful
3 = not helpful
4 = helpful
5 = very helpful

D. Evaluation of Parent Group Leaders

In this section we would like you to express your opinions about your parent group leader(s).

Please circle the response to each question that best describes how you feel.

31. I feel that the leaders' teaching was

1 = very poor
2 = poor
3 = neutral
4 = good
5 = very good

32. The leaders' preparation was

1 = very poor
2 = poor
3 = neutral
4 = good
5 = very good

33.The leaders' interest and concern in me and my child was

1 = very poor
2 = poor
3 = neutral
4 = good
5 = very good

34. I feel that the leaders in the programme was

1 = very poor
2 = poor
3 = neutral
4 = good
5 = very good

E. Parent Group

In this section, we'd like to get your ideas about your group. Please circle the response that describes how you feel.

35. I feel the group was

1 = very unsupportive
2 = unsupportive
3 = neutral
4 = supportive
5 = very supportive

36. Concerning other group members' interest in me and my child, I felt they were

1 = very unsupportive
2 = unsupportive
3 = neutral
4 = supportive
5 = very supportive

37. I would like to keep meeting as a group

YES NO

38. How likely is it that you will continue meeting with one or more of the parents in your group?

1 = very unlikely
2 = unlikely
3 = neutral
4 = likely
5 = very likely

F. Your Opinion

39. How could the programme have been improved to help you more?

40. At this time do you feel the need for additional further parenting assistance? Please elaborate.

41. What did you see as the main benefit of the Sinovuyo Caring Families Programme?

Thank you for your patience in filling out all of these questionnaires. Your input is very much appreciated, and really helps us to plan future programmes.